The Decline of Agriculture on the Tasman Peninsula, 1970-1990.

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Abstract

This thesis examines the development of the economy on the Tasman Peninsula. It argues that there have been at least five distinct historical economies. These include the aboriginal economy, the convict period, free settlement, mixed farming and modern agribusiness. Each of these five economies has drawn upon the resources of the area, the skills of the people and available technology to sustain a way of life.

In the period of European settlement, the progression of economic development has generally been from relative self sufficiency to a dependent economy strongly controlled by outside influences. Detailed examination of major enterprises that form part of current agricultural practices on the Peninsula illustrate this trend. Local orcharding, dairying and poultry industries have all declined rapidly in recent years as primary production has become dominated by agribusinesses. The detail of the loss of local autonomy varies between enterprises but the overall theme is consistent.

It is shown that a higher degree of local economic self sufficiency might be attained by careful resurrection of some past practices. This is not to advocate a return to the past, but to suggest that a future sustainable local economy can best be secured by striking a balance between the old and the new.

Acknowledgments

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To be modern is to live a life of paradox and contradiction. It is to be overpowered by the immense bureaucratic organizations that have the power to control and often to destroy all communities, values, lives...To be modern is to find ourselves in an environment that promises us adventure, power, joy, growth, transformation of ourselves and the world - and, at the same time, that threatens to destroy everything we have, everything we know, everything we are. Modern environments and experiences cut across all boundaries of geography and ethnicity, of class and nationality, of religion and ideology: in this sense, modernity can be said to unite all of us. But it is a paradoxical unity, a unity of disunity: it pours us into a maelstrom of perpetual disintegration and renewal, of struggle and contradiction, of ambiguity and anguish. To be modern is to be part of a universe in which..."all that is solid melts into air".

(M. Berman, 1982)[1]

The World Bank says we small farmers are inefficient, that we should disappear. But there's something they haven't thought about. We want to be farmers. What they do not understand is that we refuse to disappear.[2]

(B Campos, Union of Small Producers of the Atlantic,1990)

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[1] Berman, M., 1982, All That is Solid Melts Into Air: The Experience of Modernity, Verso, London, pp 13-15,

[2] Carty, B., 1990; "You can't eat flowers" New Internationalist, December 1990, No. 214, pp.18-19

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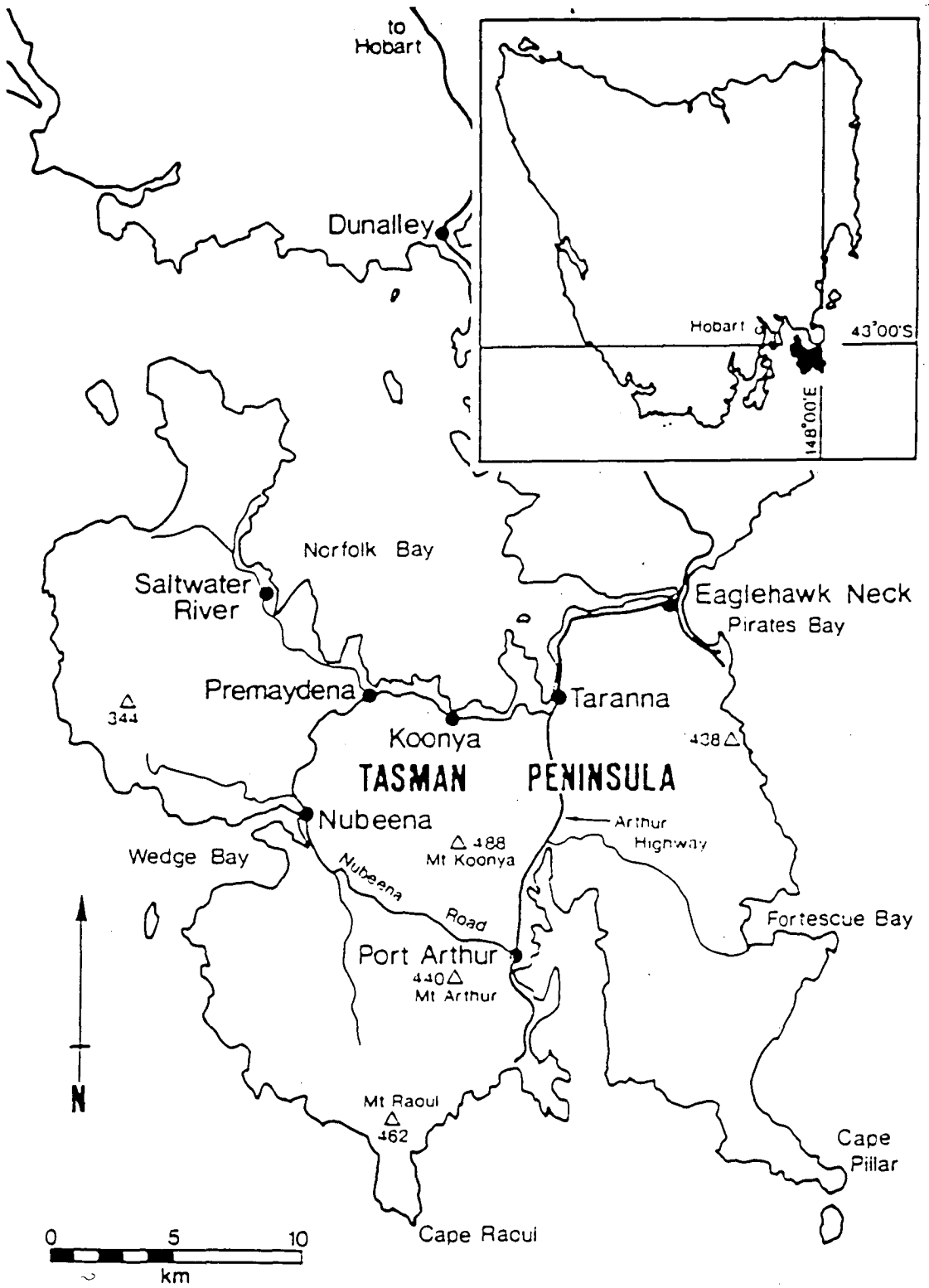

[3] Russell, J.A., 1987, Tasman Peninsula Landscape Development Manual: Eaglehawk Neck to Port Arthur, University of Tasmania, Environmental Studies Occasional Paper No 21, Hobart

Chapter One - Introduction
The Decline of Agriculture on the Tasman Peninsula, 1970-1990; Causes and Consequences.

1.1 Thesis outline

The Tasman Peninsula is located in the south-eastern corner of Tasmania. It is almost an island and is connected to the Forestier Peninsula only by a narrow isthmus, a ridge of sand dunes called Eaglehawk Neck. The Peninsula is widely known for its convict past (12 500 convicts served their sentences there) and for the ruins of Port Arthur. It is Tasmania's most popular tourist attraction.[1] The Peninsula is also known for its natural beauty; for its rugged coastlines and sheer dolerite cliffs and columns; for its isolated beaches, and safe harbours; its native flora and fauna and for its forests and rural landscapes.

In common with many other small rural communities, it offers a pace and quality of life that when compared with modern city life is still relatively peaceful and tranquil. These qualities have attracted a growing number of retirees and what are termed alternative settlers to the Peninsula and in the last decade the local population has been slowly but steadily increasing. By 1989, there were approximately 1 500 permanent residents.[2]

The Peninsula is approximately one- and- a- half hours drive from Hobart, the capital city of Tasmania and the many opportunities for outdoor recreation, relaxation and rest provided by the Peninsula have

[1] Hepper, J., 1979; Tasman Peninsula Resources: A Document of Planning Information. Office of the Comissioner for Town and Country Planning, Hobart. p.1

[2] Wood, L. J., 1989; in Smith., S.J., 1989; Tasman Peninsula Is History Enough?; Past, Present and Future Use Of The Resources Of Tasman Peninsula; Royal Society of Tasmania, Hobart, p.141

also made it a favoured holiday and weekend destination for a growing number of residents of Hobart.

Summarising at the end of his thesis on the Tasman Peninsula in 1968, G. N. McIntyre pointed to the changing direction of the Peninsula's economy. He said,

> *An increasing flow of interstate and overseas tourists promises to develop for Tasman Peninsula the same popular image of western Ireland and rural New England in the United States: spectacular scenery, features of historical interest and declining agriculture.*[3]

Twenty years later, the conservation of the Peninsula's heritage is receiving increased attention as the basis for a successful tourist industry while agriculture has continued its decline.

It seems illogical that a rural community which for so long has developed an agriculture that sustained families and communities, should now in the late 20th century find difficulty in sustaining such a basic industry. Yet it is so. While the Peninsula has fertile agricultural land, a history of many successful agricultural industries and a growing tourist market on its doorstep, its agriculture is in decline.

Agricultural decline has involved a fall in the number of farmers, a decline in returns to farmers and the loss of a way of life. The decline of agriculture has not meant a decline in terms of farmer's productivity, in fact the remaining farmers are more productive than ever before. Nor can it be described as a genteel decline, in fact there has been rapid change in farming practices, in the use of technology and the scale of operations.

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3 McIntyre, G.N., 1968; The Alienation and Settlement of Crown Land on Tasman Peninsula, Honours Thesis, University of Tasmania. Hobart.
p.77

In the last 20 years the decline of agriculture has been a characteristic of rural communities throughout Australia. This thesis will consider the problem of agricultural decline in the context of this one small, relatively isolated rural community.

It will show that while there have been many reasons for the Peninsula's agricultural decline including local factors, the most important single cause is a general economic trend which in the last 20 years in particular has seen the rapid growth of agribusiness companies and the extension of their control over local agriculture. Through the centralisation of capital and the concentration of ownership such companies have established monopoly or oligopoly control over agricultural industries and ensured the redistribution of income away from farmers and local communities towards company profits. Increasingly these companies determine the scale, pace, direction and goals of local agricultural development.

Professor Goldberg, who first coined the term agribusiness in the 1950s, acknowledged that the emergence of agribusiness brought with it what he described as, *"...problems of imbalance and maladjustments, including the problems relating to commercial farming and low income families".*[4]

On the Tasman Peninsula these "maladjustments" manifested themselves in many small farmers going out of business. As a consequence of the growing "imbalance", local agriculture increasingly benefits corporations at the expense of the livelihoods of local farmers and the health of the local economy.

This thesis will argue that the decline of agriculture is symptomatic of much more serious problems for the whole of the local economy which centre around the general loss of local economic control. It will

[4] Sargent, S., 1983; Agribusiness in Australia and Australian Agribusiness in the Third World Countries of Asia and the Pacific, Australian Freedom from Hunger Campaign Inc., Canberra. p.1-9

argue that in the past twenty years the economy of the Peninsula, of which agricuture is a substantive and indicative part, has become a colony of large corporations which determine the overall dynamic of the local economy. The developments in agriculture are but one example of what is occuring in other industries on the Peninsula including tourism, forestry and aquaculture. As a recent Government report noted,

> *Rural towns and local economies throughout Australia continue to experience a growing loss of local commercial autonomy through increased centralisation of ownership and control in banking, finance, retailing and wholesaling operations.*[5]

The most recent threat to the political and economic autonomy of the local community is the pressure for the amalgamation of the local council into a greater regional council.

The overall effect of the loss of local economic control is that the local community has growing difficulty ensuring that the wealth generated by the community is retained within the district. The Peninsula is rich in natural advantages and historic attractions, it has a growing population and tourist industry which would seem to promise a bright economic future for the region. Yet in the 1990s the local community has difficulty in capitalising on its good fortune. There is continuing social conflict over the use of resources and in some industries such as the forestry industry there is a growing scarcity of resource. Despite the many opportunities for economic development the community finds itself restricted, dependent on external sources of capital and technology and often divided within itself.

This thesis will argue in particular, that if the current trends in

[5] Department of Immigration, Local Government and Ethnic Affairs, Local Government and Regional Development Division, 1987; Australian Regional Developments; 8.1 Country Centres Project, 1986-87, Australian Government Publishing Service, Canberra. p.8

agriculture on the Peninsula continue, the decline in agriculture will not be reversed and the local economy will continue to weaken as the wealth produced by one of its most basic industries is drained from the district. As the costs of modern agriculture mount, it becomes important that viable alternatives for local agriculture be found and explored in the long term interests of the whole local community. In particular the retention within the community of the wealth generated by the community is fundamental. Ways and means need to be found of increasing local control of the many spheres of activity now controlled by agribusiness, including processing, marketing, retailing and investment. Some options for the future will be considered but it will be suggested that the most effective plan for a local economy will come from a local planning process and the input of the community itself.

This thesis will also argue at a more general level that the local community on the Peninsula does have a choice in the direction of its own economic development and that there are alternatives to the kinds of economic development experienced in the last 20 years. Economic systems are not natural or god given, they are human artefacts, historically created. As such they should be able to be changed and made to serve whatever purpose people decide. It is possible to construct a local economy which takes account of the particular characteristics and opportunities of the Peninsula and which provides its inhabitants with a livelihood and way of life that is sustainable, varied, creative and materially and spiritually rewarding. It is desirable for the local community to assert itself and to draw on the best experiences and traditions of previous economies in shaping an economy capable of responding positively to the problems and prospects of the late twentieth century

The remainder of this introductory chapter considers the reasons and consequences of the recent decline in agriculture on the Peninsula. The second, third and fourth chapters consider changes in the

orcharding, dairying and poultry industries respectively. They concentrate on the period 1970 to 1990 in the context of earlier periods in the Peninsula's history. The fifth chapter considers these developments in agriculture in the context of the history of human occupation of the Peninsula. It does this in order to provide a historical perspective to the changes in the past 20 years. The conclusion considers possible alternatives for local economic development. It advocates a co-operative solution to the common problems of farmers, the development of local investment funds, the development of local economic planning and the development of carefully selected regional growth initiatives.

1.2 Sources

Some of the information for this thesis has been gathered from taped interviews with farmers from the Peninsula, including retired and part-time farmers. 30 local farmers were interviewed between October 1990 and May 1991. At the same time information was gathered from six agricultural extension officers, some of them retired. Information on the recent history of Tasmanian agriculture was gathered from local newspapers, in particular "The Mercury" and the "Tasmanian Country". Information about agribusiness was gathered from the Annual Reports of companies and from the pioneering research of Sarah Sargent and Geoffrey Lawrence. Over the last decade they have studied Australian agribusiness in depth. Information on the history of the Peninsula was found in the Tasman Peninsula Historical Society's journal, "The Tasman Chronicle", in the "Tasman Gazette", in the papers and proceedings of the Tasmanian Historical Research Association, and in the collection of papers published by the Royal Society of Tasmania entitled, Tasman Peninsula: Is History Enough? Past, Present and Future Use of the Resources of the Tasman Peninsula. Ian Brands' numerous books provided invaluable assistance with the history of the convict period.

Although some oral sources have been used, this thesis is not an oral history. It uses a variety of other sources and the material has been written from the author's point of view, that the discussion of agriculture is not a subject for experts only but is rather a subject for everyone. Agriculture is more than a business. It is interwoven with our way of life. Food is more than a product, it is a basic human necessity.

1.3 Agricultural decline

Statistics gathered from the Australian Bureau of Statistics (ABS) give a good idea of the recent decline in agriculture on the Peninsula. The following figures are for the years 1974 to 1989. During this period: the number of agricultural establishments declined from 116 to 33; the area of land devoted to farming decreased from 22 402 hectares to 10 800 hectares; the area of sown pasture decreased from 5 358 hectares to 3 200 hectares; the area of crops decreased from 528 hectares to 200 hectares; the number of bearing apple trees decreased from over 70 000 to 30 000; the number of pear trees decreased from 30 200 to 7 000; the number of dairy cattle decreased from 1 130 to 200; the number of beef cattle decreased from 5 301 to 2 500. Growth was recorded in some areas: the number of sheep increased from 11 022 to 15 700 and the number of pigs increased from 354 to 500.[6] (See Figures 2-10)

According to McIntyre, the decline in agriculture first began in the 1950s. He argues that,

> *...the Tasman Peninsula began a slow decline in agricultural activity when the replacement of the river steamer by the motor lorry caused all farmers to incur greater transport costs than formerly comparable areas.*[7]

Other important reasons for the decline in local agriculture are

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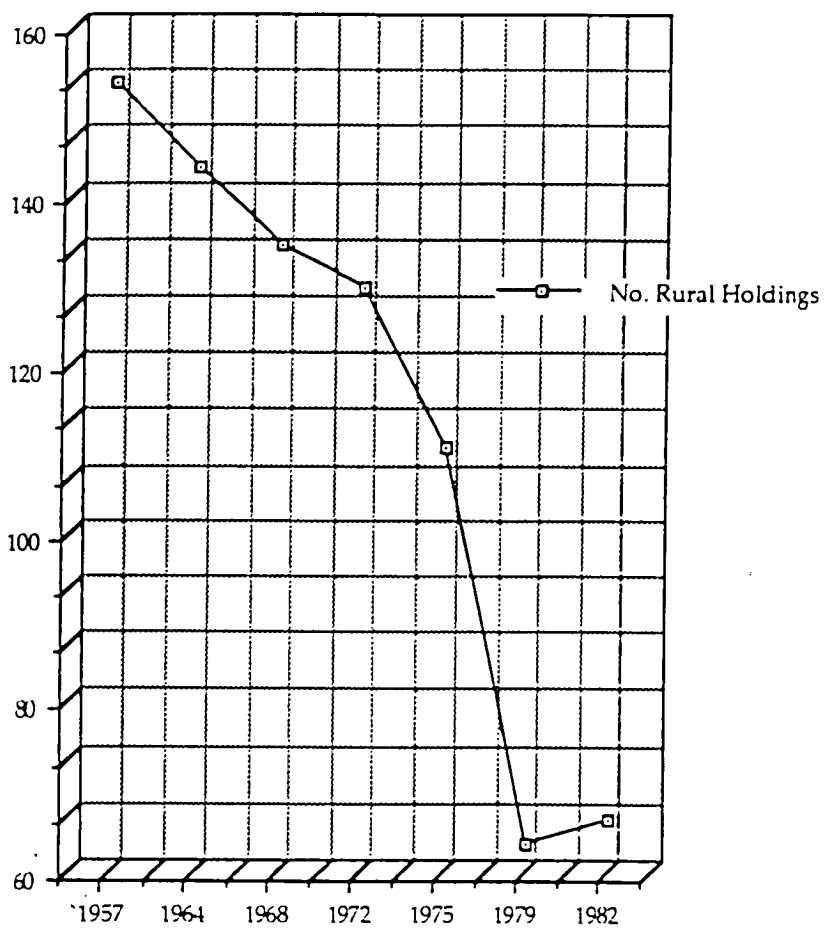
[6] Australian Bureau of Statistics, Livestock and Livestock Products, Tasmania, Cat. No. 7221.6, Hobart and Crops and Pastures, Tasmania, Cat. No. 7321.6, Hobart.

[7] McIntyre, G. N., 1968; p.76 (see note 3)

Figure 2 [8]

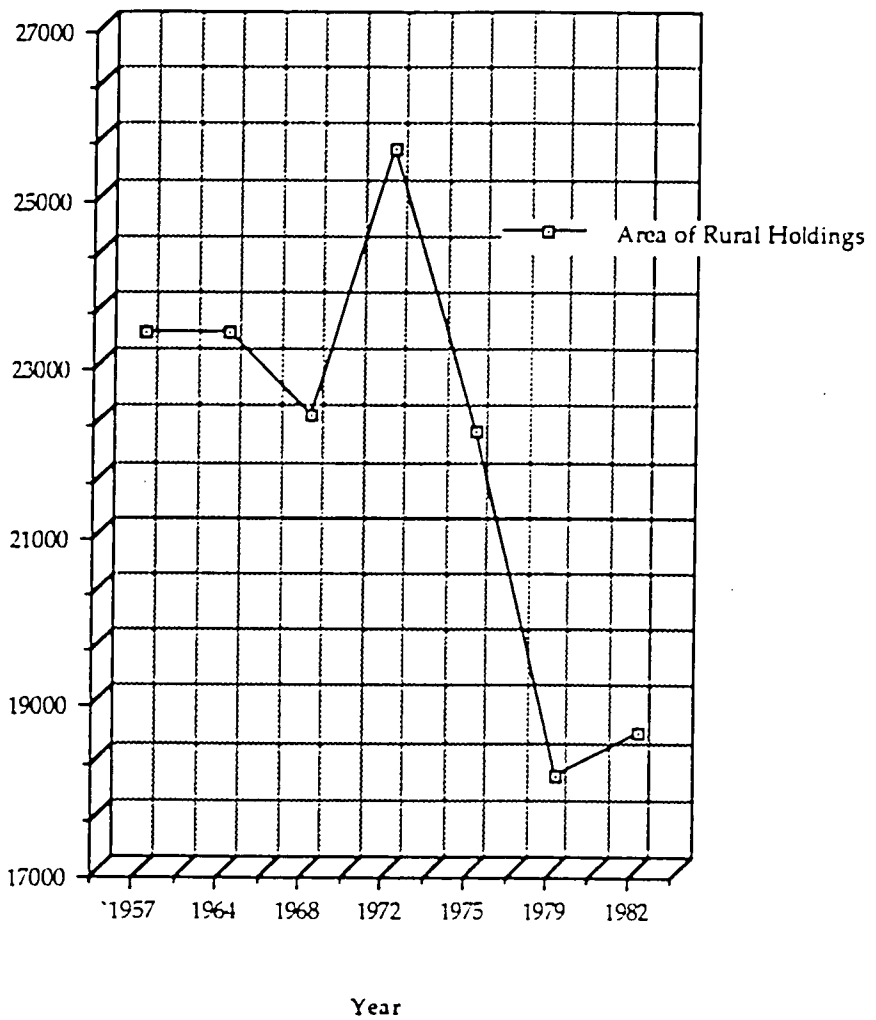
Tasman Peninsula, 1957-82
Number of Rural Establishments



[8] Source: Australian Bureau of Statistics; Compendium of Municipal Statistics, 1957-82, Hobart

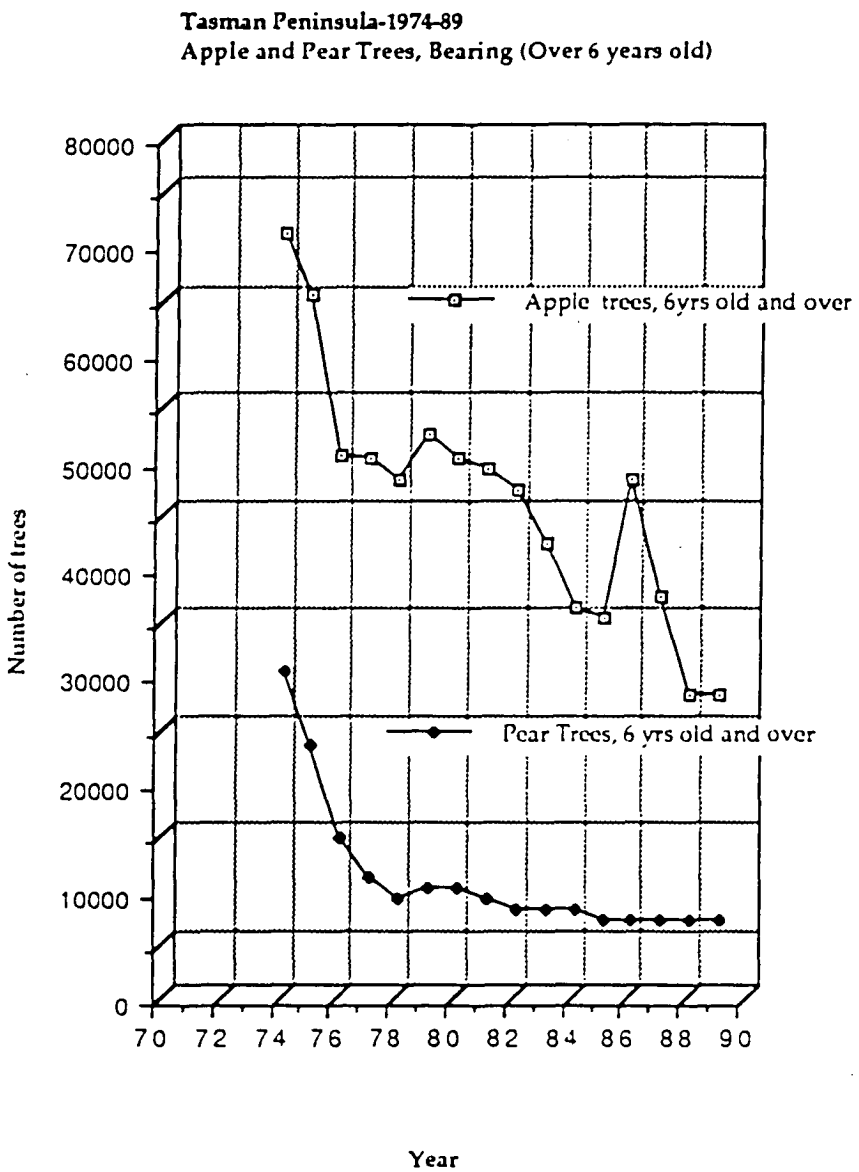
Figure 3 [9]

Tasman Peninsula, 1957-82
Area of Rural Holdings (Hectares)



[9] Source: Australian Bureau of Statistics; Compendium of Municipal Statistics, 1957-82, Hobart

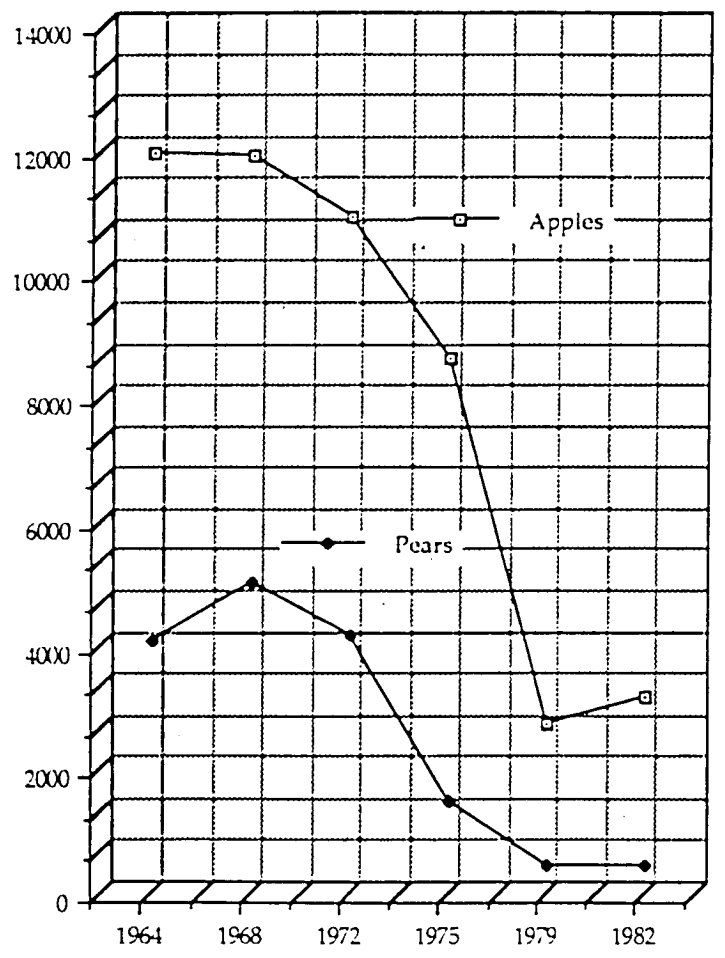
Figure 4 [10]



[10] Australian Bureau of Statistics; Crops and Pastures, Tasmania, Cat. No. 7321.6, Hobart.

Figure 5 [11]

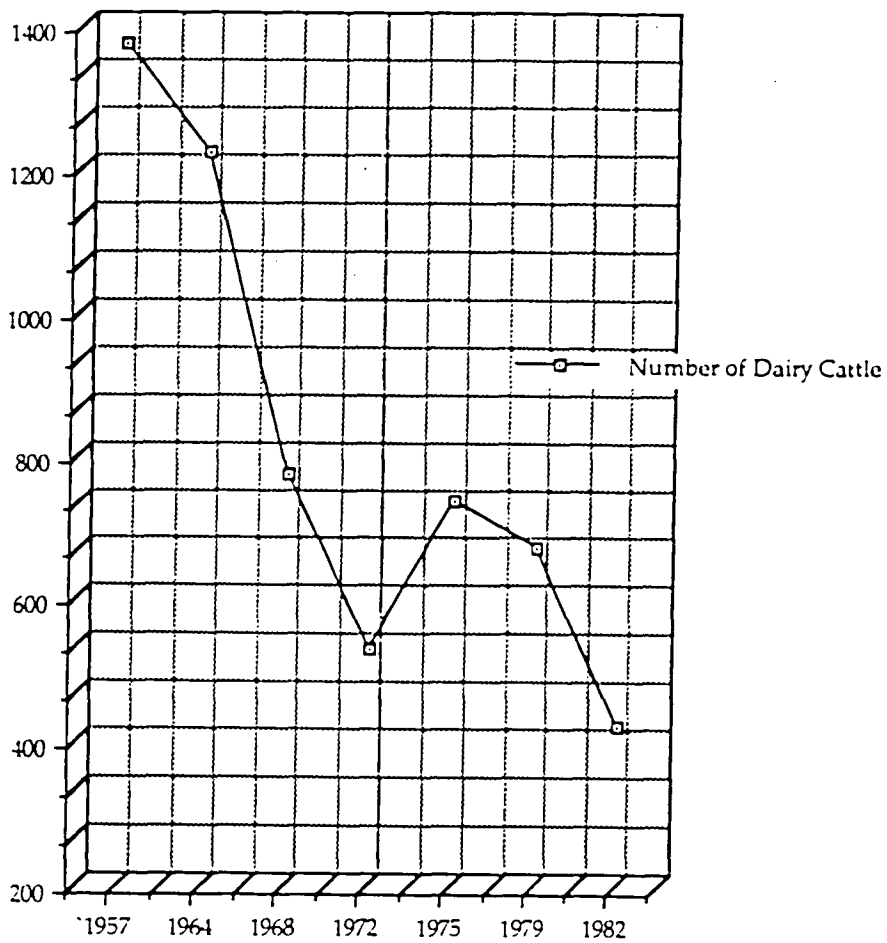
Tasman Peninsula,1964-1982
Production of Apples and Pears, (Tonnes)



[11] Australian Bureau of Statistics ; Agriculture Tasmania, 1965-1986, Cat. No. 7112.6, Hobart.

Figure 6 [12]

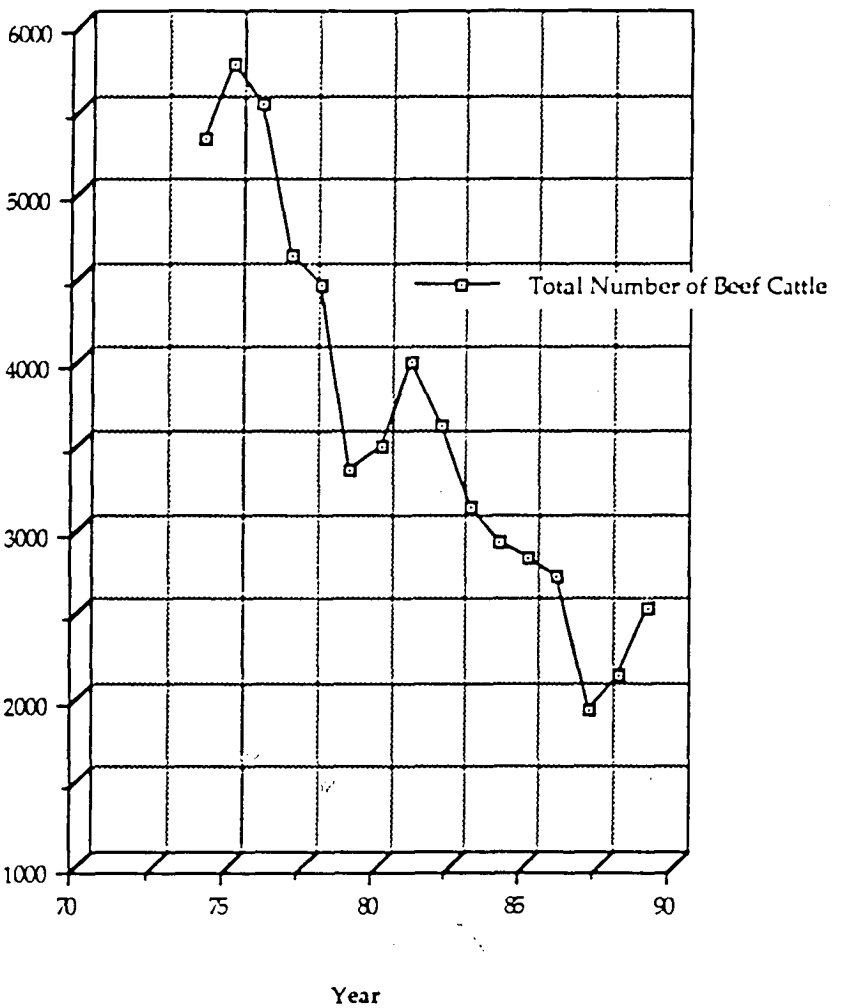
Tasman Peninsula, 1957-82
Number of Dairy Cattle.



[12] Source: Australian Bureau of Statistics; Compendium of Municipal Statistics, 1957-82, Hobart

Figure 7 [13]

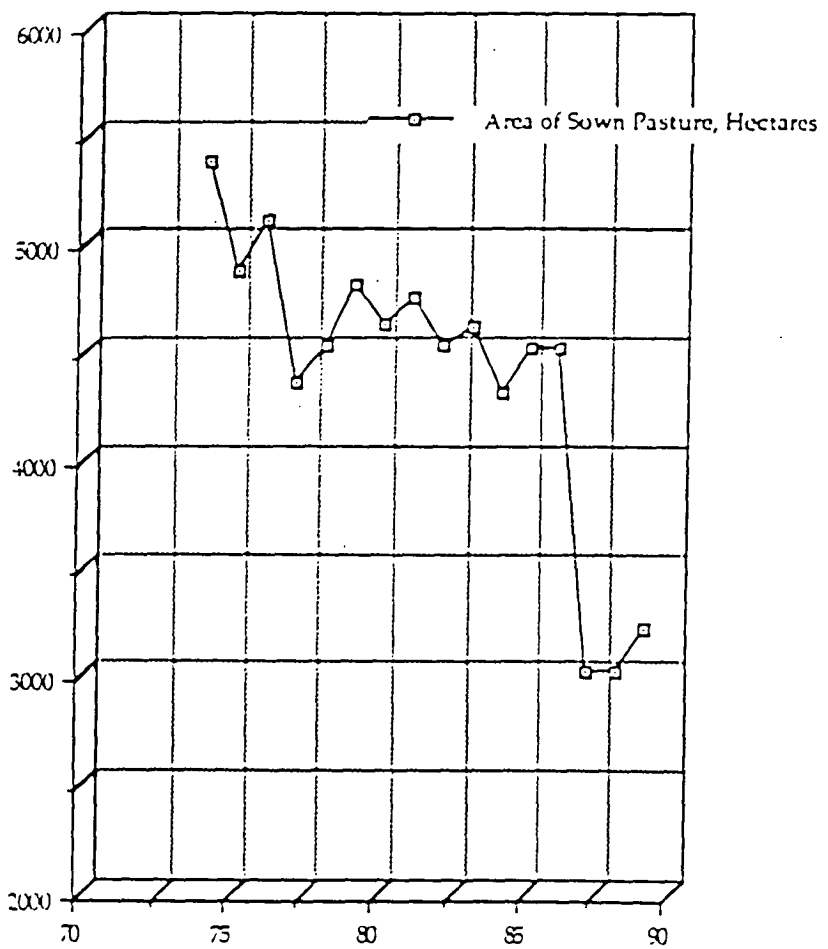
Tasman Peninsula 1974-89
Number of Beef Cattle



[13] Australian Bureau of Statistics, Livestock and Livestock Products, Tasmania, Cat. No. 7221.6, Hobart

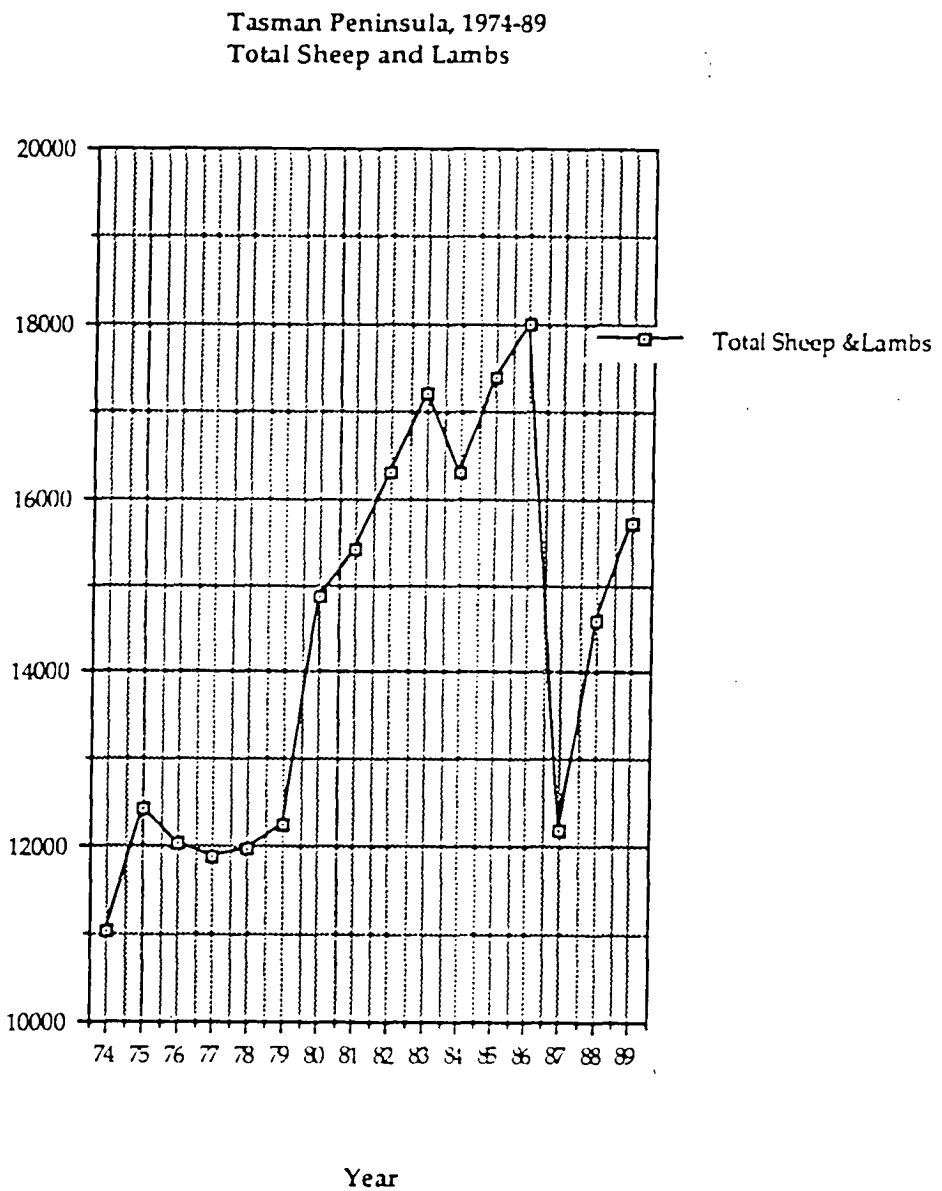
Figure 8 [14]

Tasman Peninsula, 1974-89
Area of Sown Pasture, Hectares



[14] Australian Bureau of Statistics; Crops and Pastures, Tasmania, Cat. No. 7321.6, Hobart.

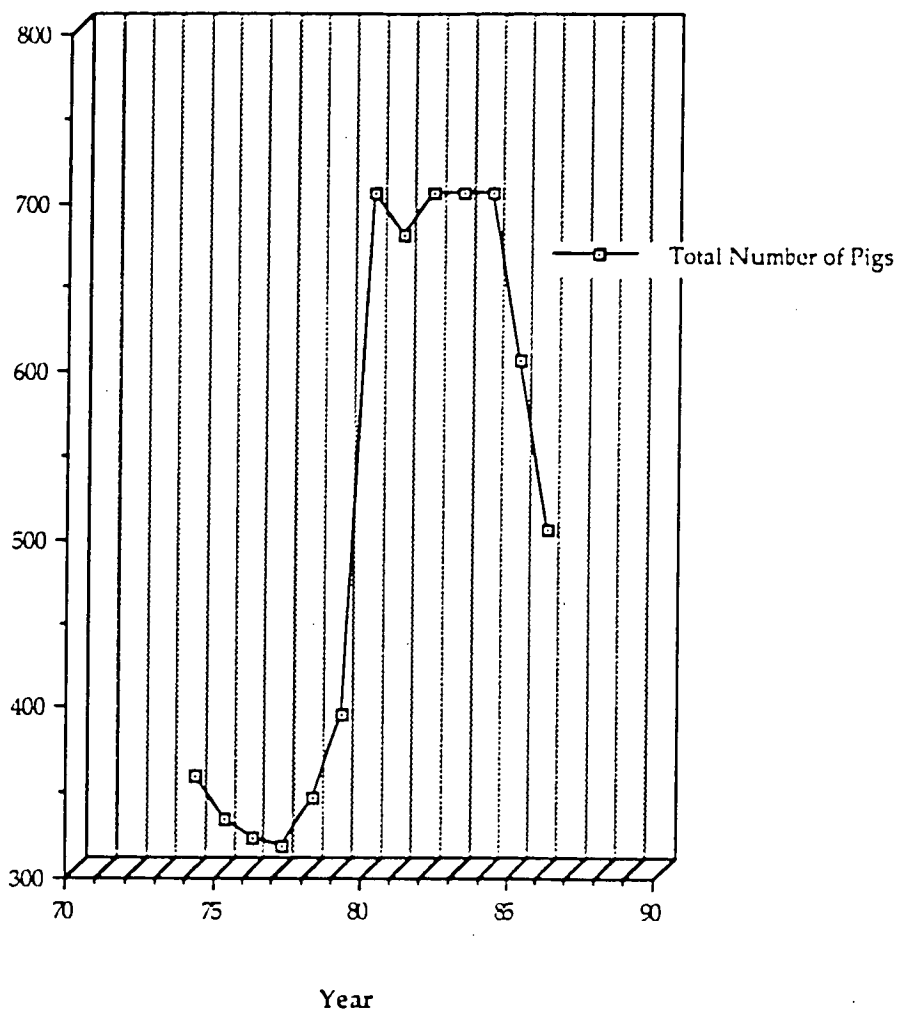
Figure 9 [15]



[15] Australian Bureau of Statistics, Livestock and Livestock Products, Tasmania, Cat. No. 7221.6, Hobart

Figure 10 [16]

Tasman Peninsula, 1974-89
Number of Pigs



[16] Australian Bureau of Statistics, Livestock and Livestock Products, Tasmania, Cat. No. 7221.6, Hobart

international and include changing markets. Britain started to introduce protection for its agriculture as early as 1963, and the drift into protectionism was fully confirmed in 1972, when it entered the European Economic Community (EEC).[17] Understandably this had an enormous impact on Australian agriculture which for so long had received preferential treatment on Britain's market for its produce, in particular for fruit, butter and cheese.

In 1988, F.W. Walker, of the Tasmanian Department of Agriculture summed up current developments in agriculture on the Peninsula. He said,

> *External market forces and the cost price squeeze have had, and will continue to have, a marked effect on the agricultural use of the Peninsula. Whereas orcharding, dairying, grazing livestock and poultry production had proved to be substantial enterprises, few farmers have been able to continue the development of a strong production base, meeting the particular requirements of changing markets and thereby sustaining themselves on fully viable farms.*[18]

The experience of "*substantial enterprises*" in the orcharding, dairying and meat poultry industries on the Peninsula shows that the problems which Walker identifies as "*external market forces*" and the "*cost price squeeze*" are themselves caused by the growing control of agriculture by agribusiness.

1. 4 Cost-Price Squeeze

Farmers were not physically compelled to leave their farms but the

[17] Lowe P., Cox C., MacEwen M., O'Riordan M., Winter M., 1986; Countryside Conflicts: The Politics of Farming, Forestry and Conservation; Gower Publishing Company, Aldershot, England, p.44

[18] Walker, F.W., 1989; "Agricultural use of Tasman Peninsula", in Smith, S.J. Tasman Peninsula- Is History Enough?: Past, Present and Future use of the Resources of Tasman Peninsula; Royal Society of Tasmania. Hobart. p.114

vast majority of farming families did not leave their farms willingly - they were compelled by silent economic processes. One of these economic processes was first diagnosed in the 1960s as the "cost-price squeeze". In Australia, between 1962 and 1987, farm costs rose by 375%, or about twice the rate of increase for farm returns. Agribusiness companies played a major role in this squeeze as they accounted for a large proportion of produce bought from farmers and therefore the prices which farmers received. Similarly they sold many of the inputs which farmers required such as seeds, machinery and equipment, pesticides and fertilisers.[19]

> *One result of the squeeze was expressed popularly in the 1960s as "get big or get out". Economists loved it for making farmers more "efficient": they had to raise their productivity to survive. It might do terrible things to rural living, the countryside, employment and the taste of food, but that was economics. The cost-price squeeze hastened monoculture, sheds and fields incorporating economies of scale. The more productive farmers became the faster they went out of business.*[20]

The effect of the squeeze Australia-wide, has been a rural exodus, lower farm income, higher farm indebtedness and higher levels of farm poverty. This is indicated by the following statistics:

> *Between 1972 and 1987, 19 000 Australian farmers left agriculture while the farm workforce declined by 32 000. The total Australian rural workforce fell by 100 000.*[21]

> *between 1962 and 1987, the average level of debt per indebted farm in Australia grew from $9 500 to $78 000,*[22]

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[19] Lawrence, G., 1987; Capitalism and the Countryside: The Rural Crisis in Australia.; Pluto Press, Sydney and London, p.13

[20] Symons, M., 1982; One Continuous Picnic: A History of Eating in Australia.; Duck Press, Adelaide, p.244

[21] Lawrence, G., 1987; p.13 (see note 19)

[22] Lawrence, G., 1987; p.29 (see note 19)

between 1975 and 1984, the level of farm poverty in Australia grew from an average of 12% to 20%,[23]

between 1980 and 1987, real farm income levels fell by 45% and were expected to fall a further 35% by 1992.[24]

Furthermore, since the 1970s, successive government reconstruction schemes have, intentionally or not, assisted in the redistribution of income away from smaller farms and towards bigger farms. As Lawrence has argued,

Rural construction measures have become important state initiated vehicles for the removal of the smaller and/or inefficient producers from agriculture to allow for the expansion of surviving units.[25]

1.5 External market forces

Underlying the particular trade problems associated with the collapse of markets in Britain in the 1970s and the increasing protection of European agriculture since the formation of the EEC, there has emerged a far more serious and long term problem which continues to manifest itself in overproduction, surplus and stockpiles.

In most Western countries following the Second World War, there were shortages of basic foods and rationing was common. Since then there has been a dramatic improvement in the productivity of farming world wide. Agribusiness has been the driving engine of the scientific and technological changes which have enabled those farmers who remain in 'the industry' to become ever more productive and efficient. Such has been the scale and pace of this change in many countries that

[23] Lawrence, G., 1987; p.45 (see note 19)

[24] Lawrence, G., 1987; p.14 (see note 19)

[25] Lawrence, G., 1987; p.255 (see note 19)

some commentators have referred to this phenomenon as the *"second agricultural revolution"*.[26] As the word revolution suggests, agricultural production of food has been changed in a quantitative sense allowing farmers to produce more, while their production methods have also changed in a qualitative way so that modern agriculture has little in common with the agriculture of two generations or even one generation ago. Modern agriculture has been industrialised and the farm shed has become a factory. Lawrence, quoting figures from the Bureau of Agricultural Economics (BAE), says that in 1987, a farmer in Australia, could feed an average of 70 people per year compared with 59 and 19, respectively, for their US and West German counterparts.[27]

As a result of the changes in agriculture, particularly in the last 20 years the problem for Western countries is no longer scarcity in but rather overproduction. Problems of overproduction became apparent in Tasmania in both the dairying and orcharding industries in the 1960s. Since then Australian agriculture as a whole has seen the problem of overproduction occurring with every major rural product at one time or another. The most recent example is the wool stockpile which led to the culling of sheep. Between December 1990 and May 1991, 10.5 million sheep were culled from Australia's 170 million flock, at a cost of $45 million.[28]

1.6 Costs of Change

At dusk I look out through old elms
Where mud-pools at the gatepost shine
A way of life is in decline,

And only those who live it know
What it is time overwhelms,

[26] Sargent, S., 1985; The Foodmakers; Penguin Books, Ringwood, Victoria, p.83

[27] Lawrence, G., 1987; p.13 (see note 19)

[28] The Mercury, 27/4/91; p.3

While they must gradually let go.[29]

Although the remaining farmers on the Peninsula are far more productive and efficient than they were 20 years ago, there has been a cost to the modernisation of agriculture and that cost has been paid by the farmers, local communities and their environments. The costs include the loss of livelihoods and less tangible things which are difficult to measure except by reference to the past. These include the loss of a large degree of local economic control and the loss of almost a whole way of life.

From 1950 to 1990, the number of orchardists on the Peninsula declined from over 40 to two, the number of dairy farmers from 40 to two and the number of poultry farmers from approximately 25 to 12. Associated with the decline in the number of farmers there was also an overall decline in employment in primary industry. In 1957, 242 people or 70% of the Peninsula's workforce was employed in farming, forestry and fishing. By 1982, 170 people or 36% of the Peninsula's workforce, were so employed. (See figure 11) The decline of agriculture has seen the loss of local businesses, the closure of local agricultural processing factories, co-operative packing and timber milling facilities and other associated industries such as the local livestock markets at Nubeena and Koonya, the decline of government agricultural extension services and the loss of local water transport.

There has also been a decline in local manufacturing and processing industries associated with agriculture. From 1957 to 1975, the number of factories fell from eight to two.[30] The overall loss of employment in agriculture and related industries also contributed to a decline in population.

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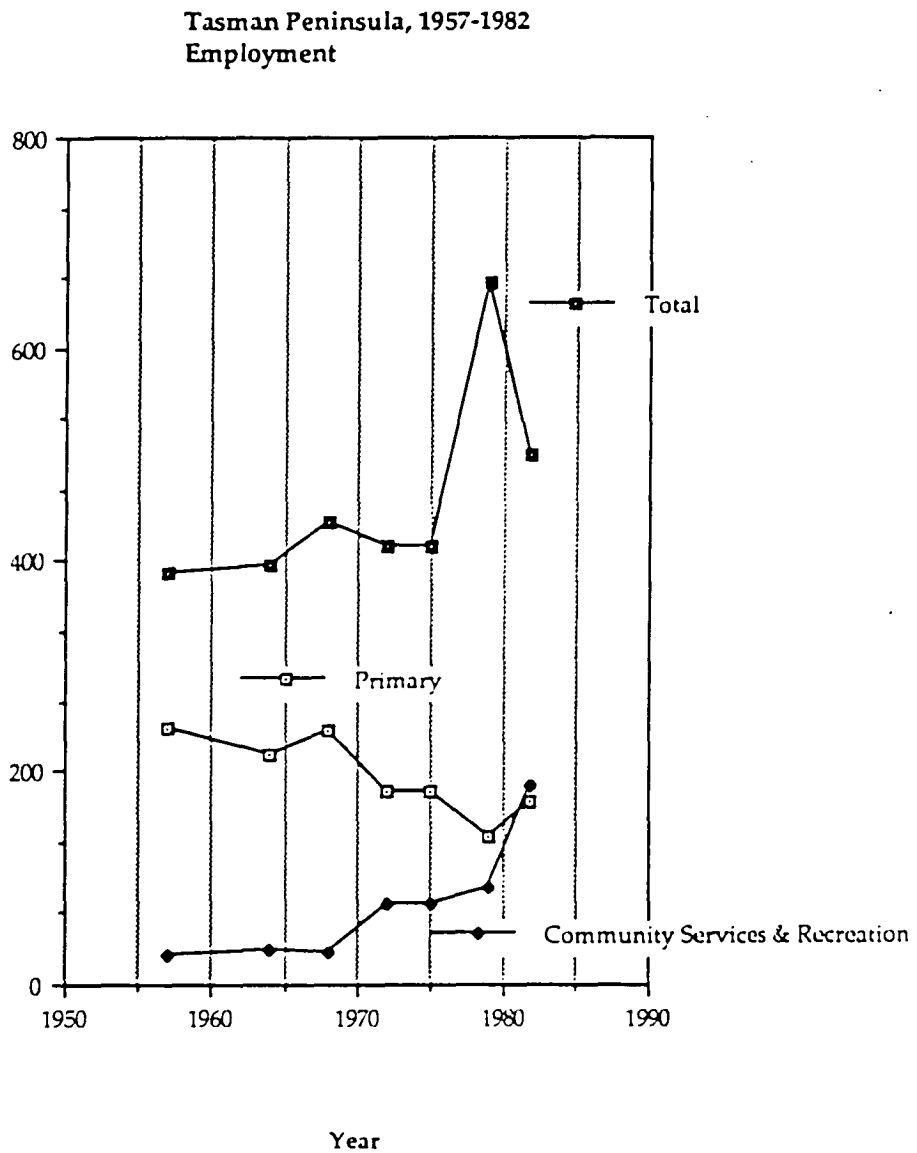
[29] McAuley, J., 1985; "In Northern Tasmania", in Smith, V., and Scott., Effects of light: The Poetry of Tasmania; Twelvetrees Publishing Company, Hobart

[30] Australian Bureau of Statistics, Compendium of Municipal Statistics, 1957-1982, Hobart.

Figure 11 [31]



[31] Australian Bureau of Statistics, Compendium of Municipal Statistics, 1957-1982, Hobart.

During the decade 1966 to 1976 the Penisula's population decreased from 1 126 to 928. [32]. (See Figure 12) Young people in particular, left the district. One farmer described this period,

> *People drifted out of the country into the towns. They had to, the young people especially, because there were no permanent jobs left. Just a few old timers who had their own little place and just took casual jobs, that was our labour then. And the very young, who were just leaving school up to the time when they made up their mind what they really wanted to do. We used a lot of their labour and the orchardists did as well.*[33]

Farming communities have also lost a kind of agriculture which was valued not only as a source of income but for itself, as a way of living. Some of the traditional farming families stretch back to the first free settlers on the Peninsula in the 1880s. Although this is a comparatively short time in the history of human occupation of the Peninsula, it is time enough for people to develop a fierce pride in their district and in its achievements and traditions. The rural values associated with this history are by no means dead. There are still many activities and clubs associated with agriculture such as the Country Womens' Association, Rural Youth and the Farmers and Graziers Association. There is still some attachment to the church, to God and to the Queen, even if the Empire is no longer. But the heart of this culture was the family farm and the family farms have been disappearing.

The pace of change has intensified. It was only in 1864 that the first bullocks were brought to the Peninsula to replace the convicts who were the original beasts of burden. The first settlers, like the convicts before them, were quick to establish a thriving agriculture based on a high degree of self-sufficiency. By the 1920s, there were established and

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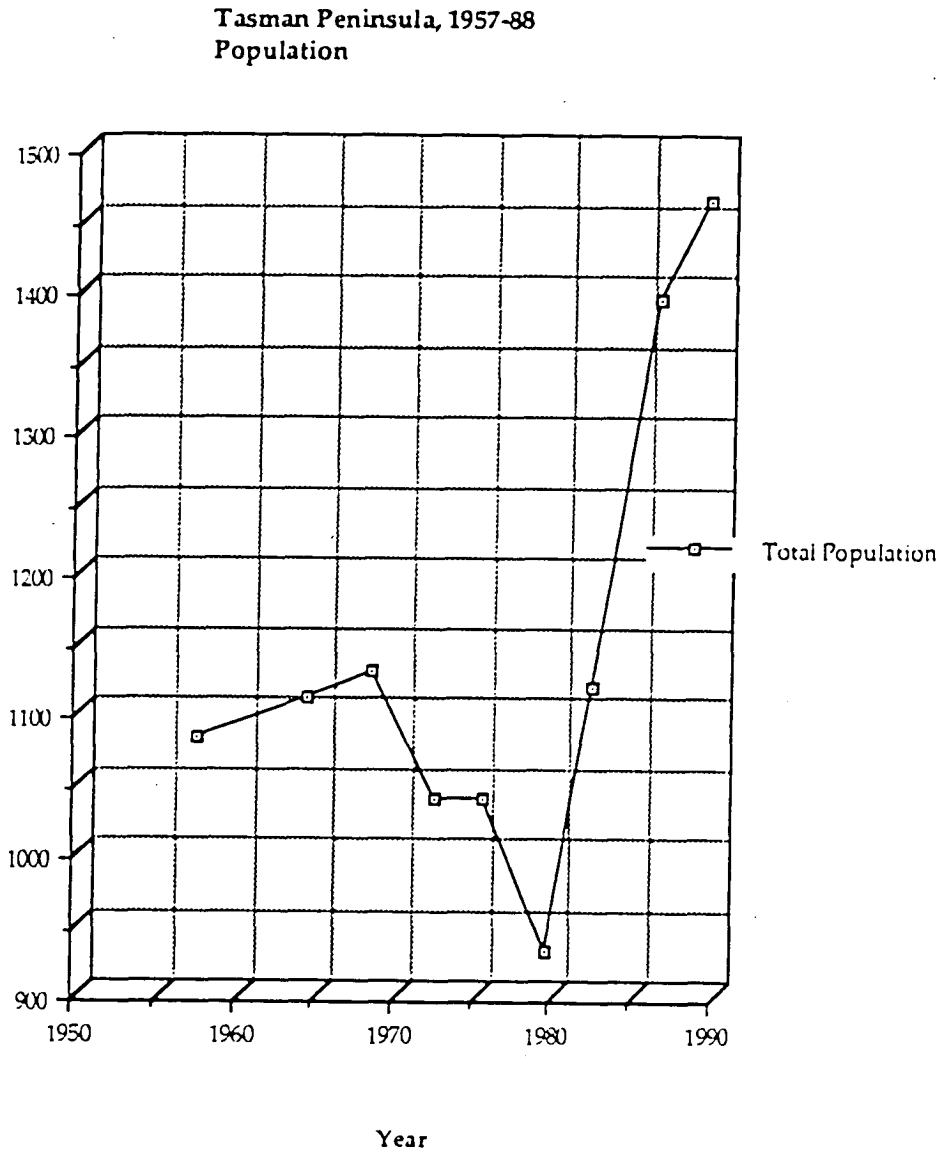
[32] Australian Bureau of Statistics, Geostats Small Area Data Service, Canberra.

[33] Personal Communication, H & E. Kerstan, 26/10/90.

Figure 12 [34]



[34] Australian Bureau of Statistics, Compendium of Municipal Statistics, 1957-1982, Hobart

growing export markets in Britain and Europe for fruit and butter from the Peninsula. The free settlers were encouraged by government Land Acts which made cheap land available and by the availability of cheap ocean transport to and from the Peninsula and Hobart. Farming families were often self sufficient for most of their immediate needs. The farm provided milk, cream, butter, cheese, eggs, fresh vegetables, fruit and meat. Many people baked their own bread, made their own clothes, and acted as vets and midwives. The ethic of "waste not, want not" was common and what families could not buy, they bartered or swapped at the local markets. With employment in the local forests, orchards and timber mills, small farms supported large families and thriving communities. Recalling these times, many of the people on the Peninsula who were interviewed spoke of the hardships of the farming life, of long hours, hard work and little remuneration, but many said that life then was also more relaxed, and that they enjoyed a good lifestyle.

From the 1930s on tractors, chemicals, pesticides and fertilisers began to make their first widespread appearance on the Peninsula. But since the 1960s there has been a revolution in the technology of farming. To survive, farmers have had to institute modern intensive farming practices and new technologies. They have been forced to become more competitive, more specialised, more capital intensive and more dependent on expensive inputs of artificial fertilizers, chemicals, pesticides, antibiotics, machinery and equipment. They have had to expand the scale of their operations and intensify their production methods. As one rural commentator has observed:

> *Farmers have been increasingly placed upon a treadmill which encourages them to further capitalise their operations and necessitates increasing linkages with external capitals. This occurs through the increasing use of credit; a dependence upon technological inputs and its associated advice; formally designed contracts with food manufacturing; and specialist advice from land agency,*

legal and accounting services.[35]

Farmers have lost much of the diversity and many of the farming practices, independence and freedom associated with mixed farming. Very little value added production now occurs on the Peninsula. The situation has worsened in the last 20 years as manufacturing industries have closed. Instead raw materials like chickens, cattle, sheep, apples, and milk are taken away in bulk to the manufacturing centres of Hobart, or further afield, for processing, packaging and retailing. At the same time farmers have experienced a relative loss of economic control over their own conditions of production; over the crops they grow; the way they grow them; their choice of technology and the choice of to whom they sell their produce. In many cases farmers have become simply "growers" or "producers" under contract.

The growing centralisation of economic control of agriculture is related to a corresponding loss of economic control by the local community as a whole. It is an integral part of modernisation which among other things can be characterised by the growth of ever larger economic and administrative structures not only in economic life but in social and political life as well. In December 1990, for example, The Mercury reported a discussion paper by the Local Government Advisory Board which was proposing "*...the modernisation of local government, in an effort to reduce administrative costs*".[36] Pressure is now being placed upon the Tasman Council to amalgamate into a greater regional council in order that administrative costs be reduced.[37] Just as in agriculture the message is the same, get big or get out.

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[35] Marsden, T.K., Munton, R.J.C., Whatmore, S.J., Little,J.K., 1989; "Strategies for Coping in Capitalist Agriculture; an Examination of the Responses of Farm Families in British Agriculture", in Geoforum; Vol. 20, No.1, pp.1-14, p.3

[36] The Mercury; 15/12/90, p.5

[37] Department of Immigration, Local Government and Ethnic Affairs, Local Government and Regional Development Division, 1987; p.9 (see note 5)

1.7 Conflict

Those farmers who have not remained on *"...fully viable farms"* have diversified into tourist ventures, tourist accommodation, host farms and charter fishing boats or have sought employment in the tourist industry. Some are simply coasting to retirement. Of the farmers who have continued to farm many have owned their land for a number of generations, or at least have a considerable degree of equity in their land and are not burdened by mortgages. Some have been able to remain financial by selling some of their land in subdivisions to weekenders, retirees and what have been termed 'alternative lifestylers'. In the face of economic pressure farmers have also sought alternative sources of income from their land including woodchipping of their forests. Social conflict has emerged particularly over the scale and intensity of the logging of forests by large woodchip companies and the Forestry Commission; over the large scale planting of pine forest plantations, over conservation of the resources of soil and forests, wildlife and heritage and the competing demands of tourism, forestry, agriculture and conservation.

Increasing social conflict is a feature of many rural communities particularly in the past two decades. This is true, not only of the Peninsula but of rural communities throughout Australia and in many Western countries. Discussing the growing social conflict in rural communities in Great Britain, one commentator observed,

> *Gradually, over the past 20 years, the rural consensus has broken down. Urban/rural conflict still remains a potent feature of rural political issues, but what has also become apparent is conflict within the countryside - between the political parties, between government bureaucracies, between locals and newcomers, and between farmers and conservationists. One consequence has been a major shift in the focus of political debate about the British countryside, from an emphasis on the antagonism between town and country to an emphasis on the*

conflicts between different rural interests.[38]

Such antagonisms have been a feature of the social conflict on the Peninsula especially in the last decade and are echoed in the following letter which appeared in July 1988, in the Tasman Gazette,the Peninsula's community newspaper.

> *Over recent years the Peninsula has seen an influx of people from the mainland and further, coming to settle in our community because of the beauty and lifestyle it has to offer. Unfortunately, many seem to bring with them attitudes better left on the other side, a sense of superiority and the sure knowledge that they could manage our affairs much better than we in our Tasmanian simplicity, could.*[39]

Conflict on the Peninsula has expressed itself in the formation of various lobby groups and a great deal of anger and antagonism. At a public meeting at Nubeena on Monday 18 July 1988, a group of residents who were concerned with

> *...costly hold-ups to developments, including restrictions on quarrying for road building.*[40]

established a group called the Tasman Silent Majority. Representatives of large businesses in the district including Hazell Bros, Safcol and Australian Newsprint Mills addressed the meeting and encouraged residents to express the views of what it saw as the

> *...large proportion of the population with middle-of-the-road views" and to counter the arguments of "minority" groups.*[41]

In the same month in an open letter to locals, a resident pleaded with

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[38] Lowe, P., et al, 1986; p.11 (see note 17)

[39] Tasman Gazette, July., 1988; Letter to the Editor

[40] Tasman Gazette, July 1988

[41] Tasman Gazette, July 1988

locals to,

> *...show active support for industry, and let these new resident greenies know that they are interfering with our livelihoods and way of life in a way which should not be tolerated.*[42]

A further meeting was called on 15 October 1988, this time by a group calling itself the Tasman and Traditional Land Users Association. The meeting was called over "*...alarm at the demands of environmentalists*". The meeting opposed unanimously the formation of any national park now or in the future and agreed that they would not accept nature-guarantee or endangered species legislation. As one resident argued, " *...with this nature-guarantee legislation we won't end up controlling our own land*".[43]

In 1989, a local branch of the Tasmanian and Farmer and Graziers Association was established.[44] A report of the meeting listed some of the views of the branch as being in favour of revoking National Estate listing and World Heritage listing for State Forests and privately owned land on the Tasman and Forestier Peninsula, and concern for the future of agricultural and horticultural extension services and research facilities.[45]

The use of the Peninsula's forest resources has proved the most controversial land use issue and this is also typical of many rural communities in Tasmania. The local forest resource has been in overall decline particularly in the last 20 years due to increased logging. The sawmilling industry for example, which is the traditional forest industry, has experienced a declining availability of good hard wood logs for timber production. At the same time there is increasing

[42] Tasman Gazette, December 1989

[43] Southern Star, 2-4/11/90, p.1

[44] Tasman Gazette, December 1989

[45] Tasman Gazette, May 1990

demand being placed upon the remaining forest resources. Export woodchip companies in the last 20 years have greatly increased the amount of timber taken from Tasmania's forests. On the other hand there has been increased public recognition of the value of forests for recreation and tourism. There has been a growing recognition of the environmental costs associated with continuing deforestation and the need to protect and conserve the remaining fauna and flora which are being lost with the clearing of forests. In the early 1980s the unique scenic and historic characteristics of the Peninsula were recognised as valuable to the whole nation and it was placed on the Register of the National Estate. This has placed further restrictions on the use of the forest resources of the Peninsula adding to the perception of farmers of a general threat to the control of their land and resources.

It is the control of the resources of the Peninsula and in particular of the land, which has become the central feature of the social conflict on the Peninsula. It can be seen in the emphasis which farmers have placed on their ownership of the land; their fears of the loss of this control with conservation legislation; their assertion of their position as the "traditional landholders" with the right to use these private resources in the way they see fit and to decide what is best for their land and forests based on the experience of previous generations. This view forms the fundamental line of resistance on the part of local farmers to their loss of control, and it is the axis around which local resistance is organised. While the anger and frustration of farming communities is understandable given the context of the increasing economic pressures upon them, the tragedy is that their anger has been so mis-directed.

They have responded to the general economic situation defensively, attacking 'Greenies', 'conservationists' and 'hippies' in particular and accusing them of being 'anti-development' and hindering local economic development. But these groups have not caused the decline of agriculture, they have not been responsible for the loss of farms and businesses and nor are they a threat to the independence of farmers.

They merely provide a convenient scapegoat for what are much more pressing economic and social pressures. In reality the greatest threat to the independence of farmers is represented by agribusiness, which effectively controls farmers privately, in the sphere of production, using the 'mysterious' market forces of the cost price squeeze.

At times this conflict divides the community almost like a geological fault line marking different generations, different world outlooks and different attitudes to development. Social groups are alienated from one another in a general atmosphere of misunderstanding, ignorance, petty vindictiveness and fear. Such an atmosphere within the community creates blockages in communication and debilitates the capacity of the local community to co-operate in solving its economic problems. What is common between old and new settlers is forgotten, human energy is wasted and common opportunities are missed.

Ironically, the traditional farming communities share many common interests with the alternative settlers. Wood describes the alternative lifestylers as having varied origins, aspirations and motivations but generally,

> *...they appear to share a desire for a simple, independent life and most have a high concern for environmental issues.*[46]

Like the first free settlers of over 100 years ago, they have settled on small landholdings in the hope of building a better way of life, one where it is possible to own some land, build a house, perhaps raise a family and lead a life that is independent, healthy and secure. Despite the difference of 100 years, this basic impulse for settlement remains the same. As one retired farmer noted, "*...history keeps repeating itself.*"[47] The traditional farming communities, on the other hand have been forced by general economic pressure to institute the changes

[46] Wood, L.J., in Smith, S.J., 1989, p143 (see note 2)

[47] Personal Communication, F. Noye, 10/1/91.

associated with modernisation that have seen them become the very opposite of their traditional stereotype, independent, conservative, slow to change. To survive farmers have embraced changes which have taken them away from many of the practices and values of previous generations.

At a deeper level the alternative settlers represent the exodus of people from the city by choice, an exodus which points to the growing unsustainability of the way of life being promoted in modern cities. This is part of a trend which is occuring in most parts of of the western world. It is referred to as "*population turnaround*". Wood, has noted that this trend involves rising numbers in small towns and agricultural localities which is:

> *...reversing the previous, fairly consistent, trend of population loss from such areas, for a long period of time.*[48]

While the Peninsula's population decreased from 1966 to 1976, by 1984 it had increased to 1 250 and by 1988 it was 1 460.[49] (See figures 13 and 14) According to Wood alternative lifestylers constituted approximately 10% of the Peninsula's population by 1981. The major concentration of alternative lifestylers is found in the Cascades Valley south of Koonya. Beginning with the purchase of a dairy farm by three families in the mid-1970s, the community has grown rapidly and, by 1986, 260 ha of forested land had been settled by 61 people (44 adults and 17 children) who considered themselves part of the new community.[50] Elsewhere on the Peninsula, smaller concentrations of alternative lifestylers have also settled. The movement of individuals into the district with particular lifestyle aspirations has continued fairly steadily throughout the 1980s.

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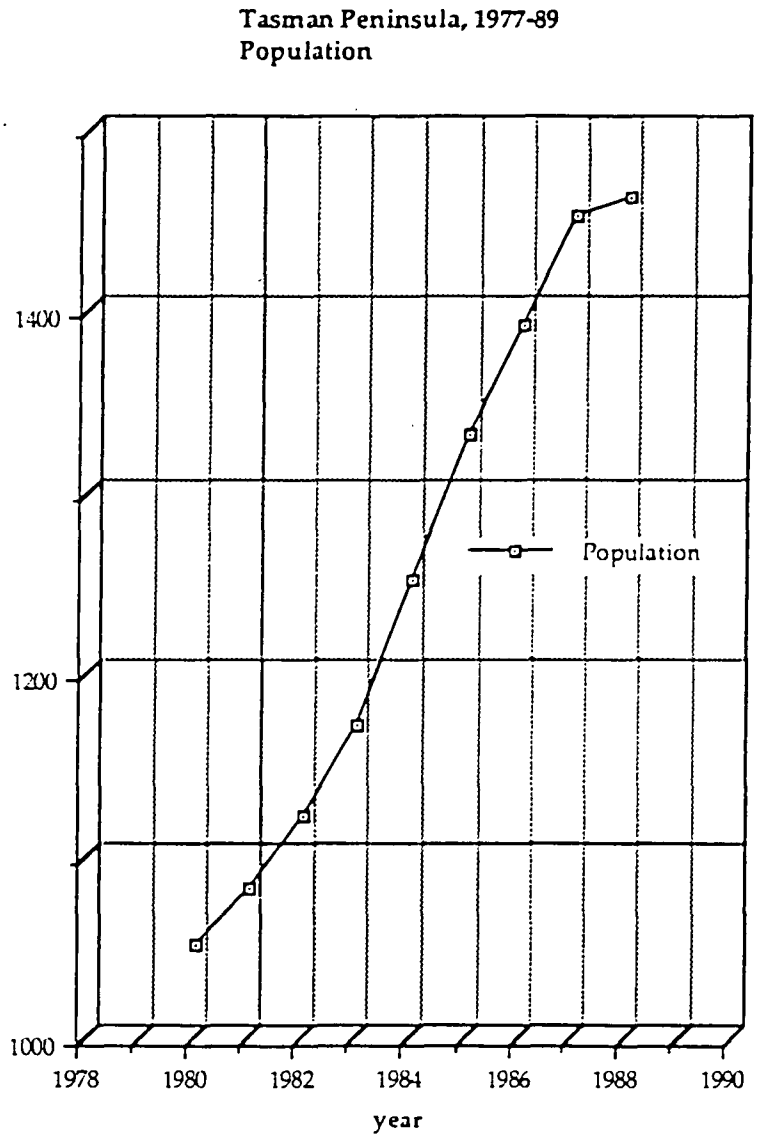
[48] Wood, L.J., in Smith, S.J., 1989, p143 (see note 2)

[49] Australian Bureau of Statistics, Geostats Small Area Data Service, Canberra.

[50] Wood, L.J., in Smith, S.J., 1989, p143 (see note 2)

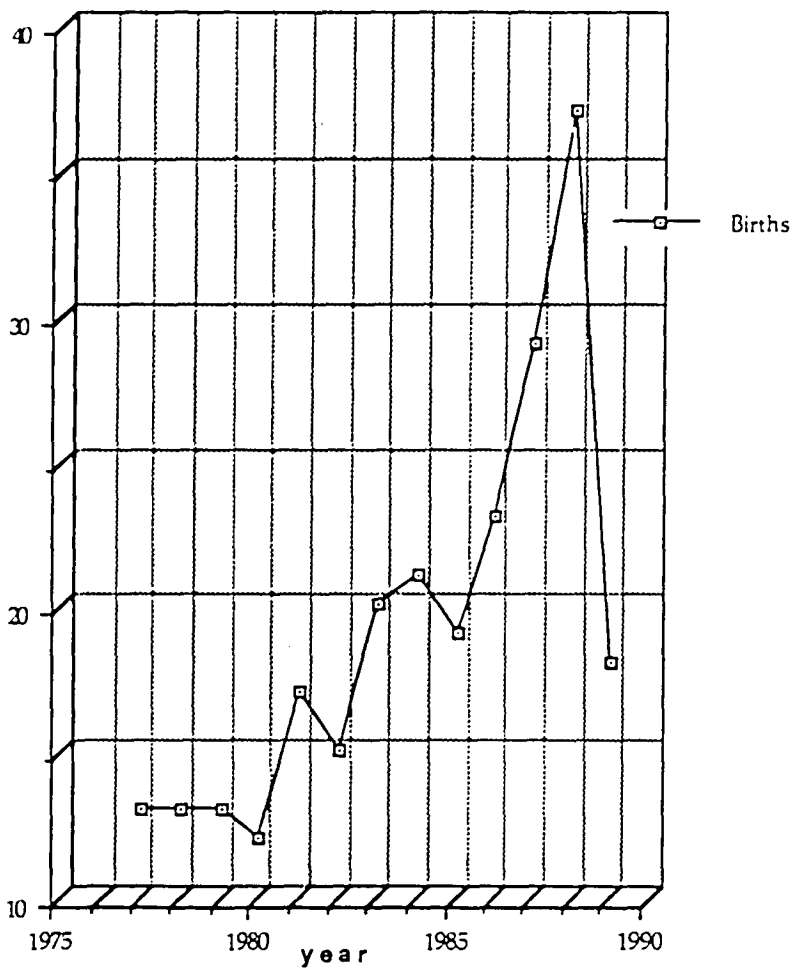
Figure 13 [51]



51 Australian Bureau of Statistics, Geostats Small Area Data Service, Canberra

Figure 14 [52]

Tasman Peninsula, 1977-89
Number of Births



52 Australian Bureau of Statistics, Geostats Small Area Data Service, Canberra

The alternative settlers represent that portion of the younger generation who are lucky enough to be able to exercise a choice in the decision of where to live. They have access to sufficient resources of capital, education and skills to make the transition from city to country life possible. The estimates of the numbers engaged in alternate living in Australia range from 15 000 to 300 000 but 60 000 is considered closest to the mark.[53]

The problems of modern city life are becoming worse and they are felt most acutely by the younger generation. These problems include high levels of sustained unemployment, growing poverty, homelessness, domestic violence, crime and suicide. Whole layers of society are being alienated, made redundant and told they are no longer wanted. Young people in particular become idle with little direction or hope for the future. Even the most cursory study of modern Tasmanian society confirms that these problems are real and growing.

In 1986, the national junior unemployment rate was 20%, but in many of the outer suburbs of Tasmania's cities and in rural districts, there was 40% junior unemployment.[54] In 1991, the youth unemployment rate in Hobart was 42%. Some social workers estimate that the number of homeless children in Tasmania approaches 5 000 and one of the main contributing factors to this is family breakdown.[55]

Recently the National Committee on Violence, reported that there was "*...A troubling increase in violence in Australia over the past decade in all areas and disturbing levels of domestic violence.*" [56] The proportion of children living in poverty in Australia has risen from 7.9% in 1973 to 20% in 1986. It has been reported that Australian teenagers are in danger of becoming layabout video watchers who

[53] Lawrence, G., 1987; p.288 (see note 19)

[54] The Mercury, 9/5/89; p6

[55] The Mercury, 25/2/89; p19

[56] The Mercury, 25/2/89; p19

devour junk food and shy away from sport.[57] Under the heading "Teenage Credit Junkies", The Mercury reported that 59% of Tasmania's bankrupts were aged 30 or younger.[58] A survey by the Australian Council of Health, Physical Education and Recreation, involving 5 000 students, showed that 25% of boys and 50% of girls had cholesterol levels above National Heart Foundation levels. It was reported that children generally were not as fit as they were 50 years ago and that fitness had not been an issue 50 years ago - it was part of life.[59] The incidence of youth suicide has more than doubled over the past 20 years and amongst male teenagers it has tripled in the past 30 years. Death by suicide accounted for 18% of all deaths in the 15-24 age group. It was thought that a major part of the explanation for this, lay in the fact that young people lacked meaning and purpose in their lives.[60]

Modern Australian society is still comparitively lucky, clever and rich in technological and material wealth. It is rich enough to afford stockpiles of food, throwaway containers, unnecessary commercial extravagance, excessive packaging and consumption and high levels of waste including the waste of human lives. It is also a society which contains a high level of economic inequality and tolerates poverty in its midst.

Economic inequality can be seen in the distribution of wealth in Australia. In 1978 it was estimated that 1% of the population owned 22% of total wealth and the top 10% owned nearly 60%. Half of all Australians owned less than 8% of Australian wealth. The top 5% owned more than the bottom 90% put together.[61] Recent figures collected in 1986, by the Income Distribution Survey, show that the inequality in the distribution of wealth has worsened. [62]

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[57] The Mercury, 25/2/89; p19

[58] The Mercury, 9/5/89; p6

[59] The Mercury, 13/5/89, p8

[60] The Mercury, 13/2/89, p5

[61] Raskall, P., 1978; "Who's got what in Australia: The Distribution of Wealth", Journal of Australian Political Economy, No. 2, pp3-16

The problems caused by the inequality of wealth are reflected in the fact that some people are denied access to the material, intellectual, cultural and spiritual resources which sustain a secure, healthy and rewarding existence. In effect society devalues its greatest resource, which is its people. It is in the light of these problems that we are entitled to ask whether the modern way of life being promoted is sustainable at all. As Schumacher argued it becomes increasingly necessary to confront,

> *...the immediate question of whether "modernisation", as currently practised without regard to religious and spiritual values, is actually producing agreeable results. As far as the masses are concerned, the results appear to be disastrous - a collapse of the rural economy, a rising tide of unemployment in town and country and the growth of a city proletariat without nourishment for either body or soul.*

1.8 Agribusiness

Sarah Sargent says the term "agribusiness" was first used in 1957 by Ray Goldberg, Professor of Agriculture and Business at the Harvard Business School and John H. Davis.[63] He believed that after World War II agriculture would benefit from the continued

> *...gradual dispersion of functions from agriculture to business ...particularly those relating to the manufacture of production supplies (agricultural inputs) and the processing of food and fibre products.*[64]

In Australia, in the past 30 years, a handful of corporations have been able to build large empires which control much of the country's agricultural and food processing industries.

> *Positioned powerfully but invisibly behind Australia's hallowed family farm, is a group of corporations called*

[62] Dilnot, A., 1990; "Wealth: From least to most.", Australian Society, July 1990, pp 14-17

[63] Sargent, S., 1983; p.1-3 (see note 4)

[64] Sargent, S., 1983; p.1-3 (see note 4)

agribusinesses. As can be expected, they form neither a homogenous nor an easily researched group. They have the reach of an octopus, the camouflage of a chameleon and the amoeba's ability to adapt. An agribusiness can be a seed company, a fertiliser manufacturer, a food processor, a commodity trader, a bank or it can be all of these things-and more-at once. [65]

At the same time as farms have been transformed and farmers squeezed from the land, a not unrelated technological boom has swept through Australia's food processing sector. During the 1960s and 1970s, many small processing factories, often controlled by local farmer's co-operatives were either forced out of business or through merger, acquisition or amalgamation were swallowed up by bigger national and international companies.

In March 1991, the Tasmanian Development Authority (TDA) published research on the food processing industry in Tasmania which showed a high degree of concentration of ownership in a number of industries. In the dairying industry, for example, 4 large firms now dominate the sector and account for 92% of turnover. [66] Of total industry turnover of $211 million they accounted for $194 million.[67] In the meat industry, the 4 largest firms account for 82% of turnover. Of a total industry turnover of $220 million these firms accounted for $180 million.[68]

Between 1969 and 1988, in Tasmania's food, beverage and tobacco manufacturing industry, 1 000 jobs were lost and 88 manufacturing establishments closed including, nine meat factories, two poultry factories, three bacon, ham and small goods factories, five liquid milk and cream factories and ten butter factories.[69] (See Figures 15 and 16)

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[65] Sargent, S., 1985; p.1 (see note 26)

[66] Tasmanian Development Authority, March 1991, 'Tasmanian Food Processing Industry Review"; Business Research, Hobart, p.9

[67] Tasmanian Development Authority., March 1991; p.8 (see note 20)

[68] Tasmanian Development Authority., March 1991; p.12 (see note 20)

By the early 1980s, the Australian food processing industry had an annual turnover of approximately $15 billion a year with the top twenty companies responsible for two thirds of the takings.[70] By 1991, the industry had an annual turnover of $30 billion.[71] There has also been a similar concentration in the control of retailing. In 1987, the supermarket chains Coles and Woolworths accounted for about 45% of total grocery sales. This is the greatest concentration of control of food retailing in any country in the world.[72]

The growing economic control exercised by agribusiness is a worldwide phenomenon. In 1974, Goldberg claimed that agribusiness had

> *...become recognised as the most important economic enterprise in the world employing over 60% of the world's economically active population.*[73]

By 1978, the United Nations Conference on Trade and Development, (UNCTAD) reported that large shares of the world's agricultural commodity trade were under the control of the largest transnational companies. Between them, the world's largest 15 agribusinesses controlled over 70% of the world's exports in cocoa, tobacco, bananas, tea, coffee, rice, wheat, natural rubber, cotton, jute and forest products. For several of these products, they controlled as much as 90% of total world trade. The figures were similar for agribusiness control of the world's food processing industries, of agrochemicals and of agricultural machinery.[74]

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69 Australian Bureau of Statistics, Tasmania - Economic Censuses, Manufacturing Establishments , Cat. No., 8202.6

70 Sargent, S., 1985; p.115, (see note 26)

71 The Mercury, 27/4/91; p.3

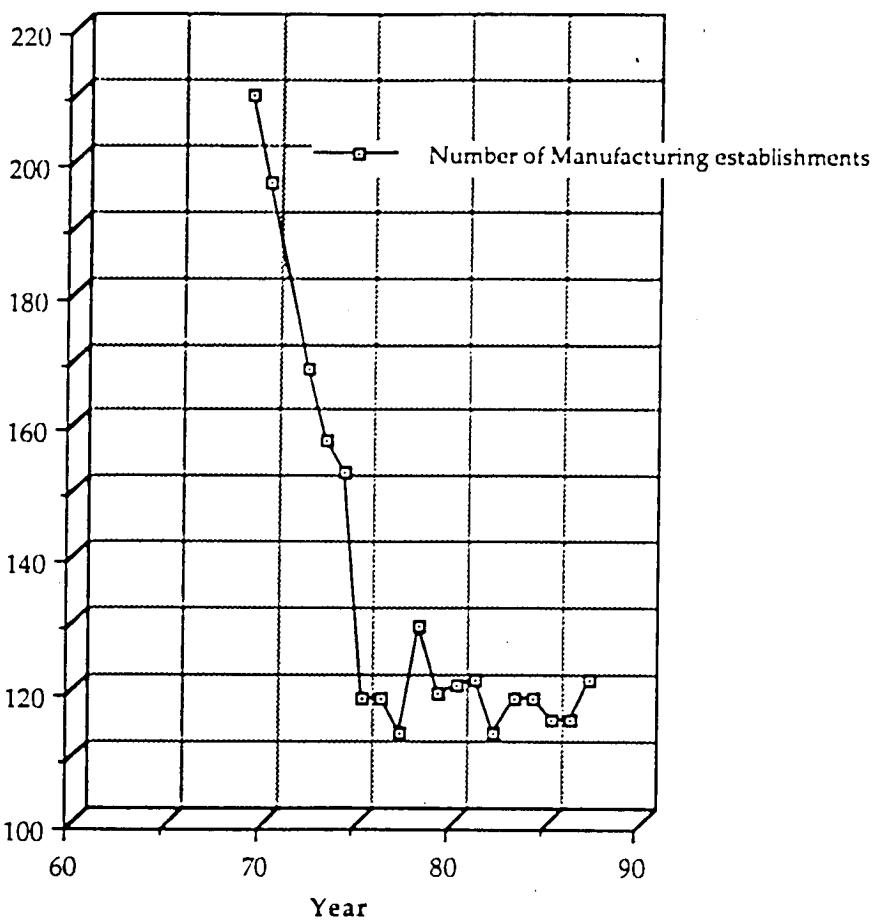
72 Lawrence, G., 1987; p.144 (see note 19)

73 Sargent, S., 1983; p.1-4, (see note 4)

74 Sargent, S., 1983; p.1-4, (see note 4)

Figure 15 [75]

Tasmania, 1969-88
Number of manufacturing establishments, Food, Beverages and Tobacco.

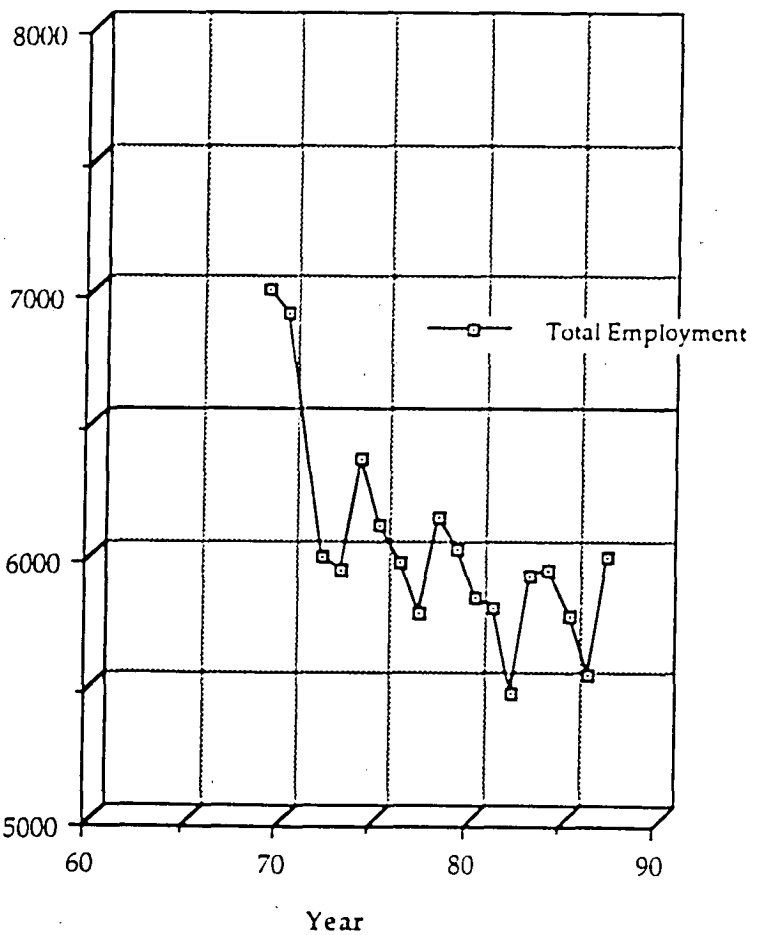


[74] Sargent, S., 1983; p.1-4, (see note 4)

[75] Australian Bureau of Statistics; Tasmania Economic Censuses; Manufacturing Establishments. Cat. No. 8202.6, Hobart.

Figure 16 [76]

Tasmania, 1969-88
Total Employment- Food, Beverages and Tobacco.



[76] Australian Bureau of Statistics; Tasmania Economic Censuses; Manufacturing Establishments. Cat. No. 8202.6, Hobart.

In the last 30 years, a growing body of research has also shown that the problems of world hunger and malnutrition are not simply the results of overpopulation and natural disasters but rather are caused in great part by the modernisation of Third World agriculture; the displacement of small traditional farmers and rural communities and the dependence of their economies on the export of one or two cash crops.

The solution of Australian agribusiness to the problems of Australian agriculture and the decline of traditional markets in Europe is to seek new markets in the Asia Pacific Region and to expand its manufacturing base in this region. The problems caused in small communities throughout this region are characteristically similar to the problems caused in Australia. They include higher levels of debt associated with the growth in dependence on imports; higher levels of unemployment associated with labour saving technology; less self sufficiency and the displacement of traditional methods of agriculture.

Sarah Sargent reported that by 1978, more than 20% of Australia's food exports were to Third World countries in the Asian/Pacific region.[77] Australian agribusiness also exports chemicals, seed varieties, livestock strains, technology and agricultural advice to the countries of the region. These exports include cereal crops such as wheat, bread, cakes and biscuits, sugar syrup and honey, canned sweetened beverages and beer, canned fish and meat, and cooking oils and fats.[78] As these countries become more dependent on Australian agribusiness, the traditional diet of their people is transformed and they suffer from new diseases. Research has confirmed a growing incidence in the region of diabetes mellitus, hypertension, ischemic heart disease, obesity and gout.[79] These conditions have been linked directly to the new diets

[77] Sargent, S., 1983; p.1 - 19 (see note 4)

[78] Sargent, S., 1983; p.19-16..(see note 4)

[79] Sargent, S., 1983; p.19-16..(see note 4)

which are "...*high in calories and often of dubious nutritional value*".[80]

1.9 Monopoly power and high profits

> *Our merchants and master-manufacturers complain much of the bad effects of high wages in raising the price, and thereby lessening the sale of their goods both at home and abroad. They say nothing concerning the bad effects of high profits. They are silent with regard to the pernicious effects of their own gains. They complain only of those of other people.*[81]
>
> *(Adam Smith, The Wealth of Nations, 1776)*

Adam Smith was one of the first classical economic theorists to set forward the doctrine of free trade. He wrote perhaps the most influential work on the benefits of free trade, in the 18th century, called An Inquiry into the Nature and Cause of the Wealth of Nations, 1776. He wrote this at a time when the industrial revolution was first gathering steam in Britain. It was a time when the advent of capitalism in Europe was a revolutionary force, which offered the possibility of freeing market forces from old feudal restrictions allowing people and economies to acheive their full productive potential.

The doctrine of free trade was based on at least two principles. First, that the various agents who supply or demand goods and services are or can be free; and second, that supply and demand are factors whose free interplay is necessary and sufficient to determine the distribution of resources and wealth to the benefit of each individual and therefore to society. This doctrine is still a powerful ideology used to explain current economic reality despite the fact that its correspondence to reality is increasingly flawed by the growth of monopolies.

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[80] Sargent, S., 1983; p.19-16..(see note 4)

[81] Fitzgerald, T., 1990; Between Life and Economics, Boyer Lectures,1990, Australian Broadcasting Corporation, Sydney; p.13

Adam Smith himself, recognised the capacity of monopolies to distort the workings of the free market and he was aware that the drive for profits could disturb the free and equitable distribution of resources and wealth. The tendency to monopoly involves the unequal growth of companies, which on gaining a decisive influence over the factors of production and prices, organise themselves into oligopolies or monopolies. They concentrate capital and wealth in fewer and fewer hands, increase their share of the market and actively exclude other producers, particularly small producers from the market. As he put it,

> *What all the violence of the feudal institutions could never have effected, the silent and insensible operation of foreign commerce and manufacturers gradually brought about. These gradually furnished the great proprietors with something which...they could consume themselves without sharing it either with tenants or retainers. All for themselves, and nothing for other people, seems, in every age of the world, to have been the vile maxim of the masters of mankind.* [82]

Today one of the main causes of the continuing crises in the Australian economy are the "*...bad effects of high profits*" which are expressed in speculative trading, corporate acquisition and takeovers and a general decline in the portion of national wealth being reinvested in productive activities and social infrastructure.

In April 1991, Senator John Button warned that Australia's food processing industry was in danger because of the "*...destructive activity of corporate raiders*". He pointed to the trading practices of giant corporations such as Goodman Field and Wattie, Elders Agribusiness, the Adsteam Group including Petersville, Tooths, and Penfolds, and Bond Brewing, criticising them for "*...poor corporate behaviour*". He warned that their collapse could, "*...bring the food industry to its knees, with many assets becoming foreign owned or*

[82] Fitzgerald, T., 1990; p13 (see note 81)

controlled".[83]

According to a recent ABS study, in the 1980s large corporations spent much of their excess profits on unbridled borrowings and speculative corporate takeovers. Australia's net capital stock grew during the 1980s by some $148 billion - but little of it was directed into industries competing internationally or the infrastructure on which these industries rely. Some $64 billion went into real estate speculation, $28 billion into the finance sector (which lent the money for speculation), $10 billion into trade, $8 billion into recreation and only $1.1 billion into improving agriculture. Less than $2 billion went into the roads system and less than $10 billion into manufacturing. Overall less than 20% of Australia's capital stock is now invested in plant, equipment and machinery compared with 25% at the start of the 1980s.[84]

1.10 The cost of "free trade"

Adam Smith also identified another of the characteristics of the *"...merchants and master manufacturers"* which is relevant today. That is they have no allegiance to place, region or country. Their allegiance is to profit. Some of Australia's largest corporations have consistently used the taxation system to evade or avoid tax. According to Lawrence, corporations operating in Australia have been able, through the application of various provisions, concessions and legal manipulations, to greatly reduce their overall corporate tax levels.

> *In 1986 at a time when the prevailing tax rate for business was 46 cents in the dollar, Elders-IXL and IEL, two of Australia's largest agribusinesses paid, respectively, 10.35 and 4.66 cents in the dollar.*[85]

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[83] The Mercury, 27/4/91; p.3

[84] Australian Bureau of Statistics, Private New Capital Expenditure, Australia; Actual and Expected Expenditure to June 1992, Cat. No., 5626.0, June 1991, Hobart.

[85] Lawrence, G., 1987; p.153 (see note 19)

In July 1991, Australia's Tax Commissioner, Trevor Boucher stated that a majority of Australia's top companies audited so far, had short-paid hundreds of millions of dollars' tax.[86]

At the same time, these large corporations can threaten governments with the withdrawal of their capital and relocation elsewhere. Here again the words of Adam Smith seem relevant,

> *A merchant...is not necessarily the citizen of any particular country. It is in a great measure indifferent to him from what place he carries on his trade; and a very trifling disgust will make him remove his capital, and together with it all the industry which it supports, from one country to another.*[87]

Despite the problems caused by monopoly and the consequent distortion of markets, most leading economists, governments and the National Farmers Federation (NFF) continue to promote extremely doctrinaire free trade policies. The NFF, in particular, has emerged since the 1980s as a powerful advocate and a firm believer in free trade. Its answer to the rural crisis is to call for greater efficiency from farmers and to expose them to competitive world markets. It proposes less protection for Australian farmers and for Australian manufacturing at a time when there is a growing move world wide towards increased protection for farmers. In Europe there are 10 million farmers and they have exercised their numerical strength to ensure their own protection. The US which is facing a massive balance of payments deficit and competition from Europe has begun to aggressively assert its agricultural interests to recapture lost markets and to build new ones. Third World countries are also keen to reduce their agricultural imports and so cut high debt levels.

The problems facing small producers will not be solved either by

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86 The Mercury, 1/7/91; p.1

87 Smith, A., 1976 (General Editors, R.H. Campbell and A.S. Skinner; textual editor, W.B.Todd), An Inquiry into the Nature and Causes of the Wealth of Nations, Clarendon Press, Oxford, p.246

Governments, agribusiness or the NFF. By supporting the policies of the NFF which include a decentralized wage system; tariff reductions on imported machinery; chemicals and equipment, and a less regulated economy, farmers are in effect advocating policies which are primarily beneficial to agribusiness. By placing their faith in free market economics, smaller farmers are in reality encouraging the process of structural adjustment whereby they will themselves be marginalised and forced out of agriculture.

1.11 The Future

The Peninsula's local agricultural economy is characterised by primary producers who do not receive a fair rate of return for their produce. It has been estimated that Australia-wide,

> *...farmers receive about 40 cents for every one dollar spent on food purchases and that proportion continues to shrink as conglomerates tie up the market outlets.*[88]

Milk for manufacturing, for example, which goes to make high value products such as cheese and yoghurt, is sometimes produced by farmers at below cost. Despite protests by farmers, prices continue to fall. The farmgate price for milk received by Tasmanian dairy farmers has continued to fall in recent years and fell a further 10% in the last year.[89] An average farmer receives approximately 17 cents for producing a litre of milk which currently retails for $1.00. From that 17 cents the farmer must pay for all the costs of production and hopefully provide a living for a family.[90]

This means at a more general level that less and less of the wealth actually generated by local farmers is retained by the local economy.

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88 Lawrence, G., 1987; p.284 (see note 19)

89 The Mercury, 20/6/1991; p.9

90 Personal Communication, P. Hallam, 21/7/91.

The local resources producing agricultural products including the soil, the animals, the crops, the orchards, and the people, receive a maximum return of 40% if lucky and less if not. The returns which farmers receive is not decided upon in a purely economic way, for it is clearly affected by what can only be termed political considerations, including the relative power of farmers vis a vis corporations. At any time, the corporation to whom farmers are under contract, is able to threaten relocation to a more favourable area (ie closer to markets and suppliers) or it can refuse to renegotiate contracts. It can also use such threats as a means to hold down prices paid to farmers.

Entry into agriculture now requires large sums of capital, which depending on the type of enterprise, can range from $100 000 to $500 000.[91] As farming becomes increasingly capital intensive fewer young people can enter the industry and corporate farming becomes more likely. Yet to attract corporate investment, farming needs to offer a competitive return on investment and looking at the future prospects for capital investment in agriculture on the Peninsula, Walker is not particularly optimistic. As he points out,

> *The return on capital invested, with the exception of some horticultural enterprises and raising deer, is less than that received from investing in Government bonds and well below that available from other recognised forms of investment, e.g. Bank Bills. With the risks that one faces with uncertain markets and variable seasonal conditions, it is only the entrepreneur with a strong desire to go farming who will invest large sums of capital.*[92]

Despite the evidence of the problems confronting smaller farmers, the solutions offered to them remain more of the same; become more efficient, become more productive and become more competitive but no matter how efficient farmers become, while the process of the

91 Walker, F.W., in Smith, S.J., 1989; p.113 (see note 18)

92 Walker, F.W., in Smith, S.J., 1989; p.114 (see note 18)

transfer of wealth continues, they will remain stuck on the treadmill, with decreasing returns and rising costs.

Walker suggests that the key to future agricultural use of the Peninsula will be in the hands of those farmers who are "*...innovative and entrepreneurial and seek out markets*"[93], "*...who have the desire, the capital and guarantees of profitable markets*"[94] and who have the "*...necessary expertise to manage the enterprise successfully*".[95]

There can be no doubt that some innovative farmers on the Peninsula will suceed "independently" in the future as they have succeeded in the past, but the question is how many? Current trends would seem to indicate that the number of farmers will continue to fall and mere survival will be accounted as success. Peninsula farmers would never seem to have lacked the qualities of innovation, enterprise or managerial expertise, but these qualities are no longer enough.

In October 1990 the President of the National Party said Australia was "*...facing the worst rural crisis in its history*".[96] In May 1991, the President of the NFF, John Allwright said, "*...Australian farmers could be facing the worst agricultural crisis since the 1890s*". He said,

> *...many people would be forced from family farms.....It was heartbreaking to watch years of work, sometimes generations of enterprise crumble around you.*[97]

As more and more small farmers find themselves on non viable farms we are faced with the conclusion that modern agriculture is no longer sustainable for the majority of farmers. Speaking in 1985, Professor J.V. Lovett, Professor of Agricultural Science at the University of Tasmania suggested as much:

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93 Walker, F.W., in Smith, S.J., 1989; p.111 (see note 18)

94 Walker, F.W., in Smith, S.J., 1989; p.112 (see note 18)

95 Walker, F.W., in Smith, S.J., 1989; p.112 (see note 18)

96 The Mercury, 26/10/90; p5

97 The Mercury, 15/5/91; p.5

> *...100 years hence I think it likely that agriculturalists will perceive the events of the First Chemical Age of Agriculture, spanning the period, approximately, 1945-1985, as an aberration in the total agricultural time frame.*[98]

The recurring rural crises in Australia in the past 20 years are the consequence of the most recent revolution in agriculture launched under the banner of "structural adjustment" and "free trade" and the market imperatives of "efficiency", "competition" and "economies of scale". Each new crisis is a part of the ongoing crisis of modern agriculture.

The problem for local farmers is how to keep the control of "substantial enterprises" in the hands of local farmers and to ensure a fair return for their produce, labour and capital. If modern agriculture continues on its present course it becomes important to consider viable alternatives and directions for local agriculture. Ways and means need to be found to ensure the long term sustainability of farmers and their families, to generate local income and employment, to foster substantial enterprises which are locally owned and controlled and to strengthen the local economy rather than diminish it. Above all it requires that farmers resist the pressures to become more competitive and find new ways of economic co-operation. As one rural commentator has observed,

> *If agriculture is to maintain its present vital role in the Australian economy co-operation offers about the only feasible road to follow. I can see no long term future in Australia for the individual farmer who stands alone, reliant solely upon his resources of land, capital and labour.*[99]

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[98] Lovett J. L., 1985; 'While The Earth Remaineth...' Reflections on Contemporary Agriculture; Occasional Paper 40, University of Tasmania, Hobart, p.8

[99] Lawrence, G., 1987; p.279 (see note 19)

Chapter Two
Orcharding on the Peninsula, 1970-1990.

> *It is hard to imagine how things have changed so much. It is unbelievable. The big revolution in the orchards really came in the early 1970s. The old growers were bought out by newcomers. England didn't take our fruit anymore and we had to install cool stores. That was the beginning of the end. Some overcapitalised and they could never recover their costs apart from two or three orchardists.*[1]

2.1 Introduction

The early success of orcharding and the export of fruit from Tasmania and Australia as a whole, was largely due to the suitable climate and soils found in the new colonies. As a short history of Henry Jones and Company, a major fruit canning firm, notes,

> *... it would have been surprising if Australians had failed to utilise to the full, the splendid opportunities afforded by nature.*[2]

Added to this natural advantage was the advent of refrigerated shipping in 1887 which made it possible to export Southern Hemisphere fruit to the markets of Europe and in particular to Britain, to coincide with the Northern Hemisphere winter. Tasmania led the world in the early days of apple shipping. When it was proved that apples could be shipped successfully under refrigeration, 20 000 kilometres from Tasmania to the United Kingdom the growers from the Pacific coast of North America followed suit.[3] It was this export

1 Personal Communication, H. & E. Kerstan, 26/10/90

2 IXL, Henry Jones and Co. Pty Ltd, 1966; A Brief Account of the Early Days of this Tasmanian Enterprise, Its Progress and Development, Hobart, p.1

3 IXL, 1966; p.3 (see note 2)

potential which really gave impetus to the development of the apple and pear industry in Tasmania.

The 1960s were the high point of the apple and pear industries. Tasmania was exporting record quantities of apples and pears and was responsible for over 60% of Australian apple exports to Europe. Tasmania became synonymous with apples...But the 1970s and 1980s saw the collapse of the orcharding industry in Tasmania and continuing crises. The overall reason for the collapse was the failure of Tasmanian growers to remain competitive in the traditional markets of Europe and particularly Britain. This was partly due to the formation of the Common Market and later the European Economic Community which removed trade preference for Commonwealth fruit. Also, increasing production of fruit in Europe had led to continuing surpluses and gluts in the late 1960s. With a greater use of cool stores and controlled atmosphere storage, larger quantities of this fruit could be stored to meet local demand in the European winter. The net result of these and other changes was a rapid decline in the demand for fruit from Tasmania and other southern hemisphere producers. Competition between exporting countries, especially Australia, New Zealand, and South Africa became fierce. Increasingly, it was only the major fruit exporting companies, agribusiness and big orchardists who could survive in this economic world. Despite the overall decline of the industry, bigger concerns have been planting out new orchards and investing in new equipment and sprays. The number of small orchardists has been dramatically reduced, along with the old unwanted varieties of apples. Many rural communities including those on the Peninsula have been greatly affected by these changes in orcharding.

> *We didn't want to spend the money on upgrading our orchards, because we had all the wrong varieties by then. Everything had changed by then, we used to have Sturmers and Bismarks and the early one, a lovely apple, I've forgotten the name, but you hardly see it now, its*

practically unavailable.[4]

In the twenty years between 1970 and 1990, orcharding on the Peninsula suffered a dramatic collapse. In the 1960s, there were approximately 40 orchardists on the Peninsula, today there are only two. But orcharding has not simply declined, it has also been changed, and according to some, revolutionised. The days of the small orchard are gone. Modern orchards must be big enough so that economies of scale help lower production costs. Orchards are continually reworked and planted with the latest premium varieties of apples and pears to satisfy the changing market requirements. To survive, the modern orchardist also has to be a highly specialised and efficient producer.

2.2 Early Years

> *About October the pear trees all came into bloom and the exquisite pleasure of standing in the midst of thousands of trees all covered with their beautiful white flowers, which exhaled a lovely perfume, was one of the first pleasures obtained from my pears.*[5]

The first orchards on the Peninsula were planted by convicts around Port Arthur and the former outstations at Impression Bay (Premaydena) and Cascade Bay (Koonya).[6] The first year of free settlement in 1881 after the closure of the penal settlement, saw the production of 51 bushels of apples and 4 bushels of pears.[7] One of the early orchardists on the Peninsula was Dr Harry Benjafield who left an account of the orcharding of the 1880s in his memoirs.

> *I knew nothing about fruit growing and at that time no fruit had been exported beyond Australasia but there was every indication that we would soon extend our outlet to*

4 Personal Communication, H. & E. Kerstan, 26/10/90

5 Benjafield, H., 1914; The Tasmanian, Unpublished memoirs, Hobart, p.8

6 McIntyre, G.N., 1968; The Alienation and Settlement of Crown Land on Tasman Peninsula, Honours Thesis, University of Tasmania. Hobart; p.31

7 McIntyre, G.N., 1968; p.31 (see note 6)

other countries and I took up pear growing as my chief hobby as many thousands of acres were already planted with other fruits, especially with apples. I also saw what big prices were being paid for good pears in England. I felt certain that the time was not far distant when ships would successfully carry our pears to England, but I felt sure that only hard, long keeping pears would bear the journey.[8]

As France was then the *"...great country of pears"*, he sent to Transon Brothers of Orleans for all the long keeping varieties they could send him and some 200 young trees of about 30 varieties arrived in due course.[9] He described the first fruit from his trees in glowing terms,

These beautiful fruits of exquisite flavour grow in perfection here on big standard trees in the open air. I understand that when grown at all in England they are grown in hot houses. As it melts in the mouth its flavour is a compound of pineapple and port wine. I might write of fifty varieties of pears all excellent dessert and my aim is to presently get them carried and sold at such a price that everybody can eat and know what a good Tasmanian pear is like. Some of my Beurre Bosc were enjoyed by the late and lamented King Edward and my Doyenne Du Comice and Glou Morceau graced the table of our present King at his coronation. The Royal Horticultural Society of England awarded me a medal for the excellent quality of the fruits. I exhibited in their show held in June 1906 and the judges said of them, "Unusually full of juice and sugar of superlative flavour".[10]

The fruit the Peninsula was producing was 'fit for kings'. Coastal ships provided a cheap form of transport for the fruit to the export facilities in Hobart. By 1916, the area under orchard first exceeded the combined total of all other crops. Orcharding had become the single most

8 Benjafield, H., 1914; p.10 (see note 5)

9 Benjafield, H.,1914; p.8 (see note 5)

10 Benjafield, H., 1914; p.8 (see note 5)

important agricultural activity and one of the mainsprings of community life on the Peninsula.[11]

The depression of the 1930s saw a halt in the growth of the industry but it proved to be only a temporary setback. By then orcharding had been established for 50 years and in addition to the trees, fixed capital included: jetties, packing sheds and mills producing case material.[12] Orcharding was again affected by the Second World War when the European markets were closed and apples were destroyed in large quantities under a government acquisition scheme.[13] The orcharding industry suffered many other setbacks caused by interruption of international trade, as well as the vagaries of the weather and nature including: droughts and floods, frost, fire, hail and diseases such as the black spot infestations. But despite these setbacks, apple and pear orchards provided the backbone of the Peninsula's economy for the period from 1920 to 1960, and contributed to associated employment including: the timber cutting and saw milling for making the boxes, cartage of the apples by steamer or truck, work in the orchards like pruning and harvesting, and picking, sorting and packing during the harvest season. As one farmer said,

> *The Peninsula was built on orchards. You could rear a family of eight, on ten milking cows, growing potatoes and working in the orchards. They weren't the richest people but they got by. In the hey-days of orcharding with the picking, packing, timber cutting, case making and carting, orcharding must have been employing over 400 people.*[14]

2.3 The Booming 1960s

The unofficial title given to the State's apple export season in the 1960s

11 McIntyre, G.N., 1968; p.60 (see note 6)

12 McIntyre, G.N., 1968; p.67 (see note 6)

13 Personal Communication, N.& K. Noye, 17/3/91.

14 Personal Communication, N.& K. Noye,17/3/91.

was "Operation Fruitlift". The apple harvest required a huge army of labour and lasted for 13 weeks while 6 000 000 cases of apples and pears were picked, packed and delivered to over 40 overseas ships. In the 1960s, "Operation Fruitlift" was the biggest harvest in the Southern Hemisphere.

But a crisis was looming. In 1969, Australia had a surplus of over 1 000 000 tons of apples.[15] In the early 1970s, it was reported that European Common Market countries had destroyed about $250 million worth of first grade fruit in the previous five years because of over production.[16] The British government introduced a "tree pull" scheme to overcome their surpluses. They offered subsidies to their growers to pull out trees of unwanted varieties. European apple and pear production had greatly increased and many countries including France had expanded their cool stores, and introduced controlled atmosphere stores which could hold their fruit, in reasonable condition for longer periods. In short, there was less demand for southern hemisphere fruit.[17] Added to this was the formation of the Common Market and later the European Economic Community and the protection of the European market from imported fruit. With a declining market, competition became more intense.

The trade barriers and surpluses caused a crisis in the apple and pear industries of Australia as a whole. But the impact was felt even more acutely in Tasmania because of its dependence on exports to Europe and in particular to Britain. By 1977, it was reported that total exports of Tasmanian fruit had dropped by more than 4 000 000 bushels in the last decade.[18]

Australia's competitors in the Southern Hemisphere included: Chile, South Africa, New Zealand and Argentina. In 1989, apples were

15 The Mercury, 27/9/69, p.7

16 The Mercury, 20/9/72, p.29

17 The Mercury, 26/1/77, p.13

18 The Mercury, 24/3/77, p.8

Chile's second largest export crop after grapes
(in terms of area planted). During harvest season, apple pickers in Chile earned approximately $3.50 a day. Approximately 400 000 seasonal labourers (*temporeros*) live a hand to mouth existence in Chile. Export companies and landowners actively oppose the organisation of the *temporeros* into unions seeking better conditions. Fruit is also one of South Africa's most valuable exports although these exports have been affected in the last decade by boycotts and economic sanctions. The apple pickers in South Africa receive only about $19 a week.[19] South Africa is also closer to Europe which reduces transport costs and it has used an aggressive and innovative sales promotion policy.

2.4 Spray or Grub

> *You had to work your orchards, spray it to keep the pests down so the big orchards wouldn't get the pests. There was a limit, you could have a few trees around your house but you could not have an orchard. It was spray or grub. And thats what we did, we put a blade on the front and grubbed it all out.*[20]

In 1972, the Tasmanian Department of Agriculture reported that 365 hectares of orchard had been grubbed out since the previous export season. It was said that there was an atmosphere of despondency and uncertainty in the industry.[21] Some growers preferred to only "partially pull", to increase their viability by removing unpopular varieties and replacing them with varieties in greater demand. Other farmers applied for a total pull, left orcharding and entered other forms of agriculture. Beef cattle in particular was one favoured option. [22] Many farmers also moved to the city in search of a regular income.

19 Shaw, S., 1979; New Internationalist, October, p.4,

20 Personal Communication, H. & E., Kerstan, 26/10/90.

21 The Mercury, 5/1/72, p.9

22 The Mercury, 20/9/72, p.29

Whole rural communities suffered declines which had not been felt since the great depression in the 1930s.

A study of the Huon Valley in 1974, reported on the effects of the "*...huge process of adjustment*" occurring in the community as a whole, caused by the changes in orcharding. The study included the whole region of the Huon Valley and the Peninsula. Between 1969 and 1973, it found that some 50 growers entered the industry but in that time 127 growers left the industry by selling, grubbing or failing to maintain their orchard.[23] The small orchardists were leaving and the orchardists remaining were consolidating their holdings. The study also found that of those orchardists remaining, farm indebtedness had greatly increased between 1969 and 1972. A large proportion of the farm debt was owed to exporting agents. Exporting agents were owed 55% of total funds outstanding in 1972. It also found that the higher indebtedness was incurred as a result of borrowings mainly for working capital.[24]

2.5 Structural Changes

To understand the changes in the apple and pear industry it is helpful to know something of its structure and some of its history. It has been traditionally controlled by the big exporters and manufacturers. Many orchardists were simply "growers". According to one Tasmanian orchardist, after having seen to the harvest in April, farmers did not get paid for the fruit they shipped, until the following December or January, by which time they had to borrow money again to buy the fertilisers and sprays and pay the wages to "*...put the next years's crop on the trees*" and many orchardists were often in a state of indebtedness.[25] As far as actual income from exports was concerned,

23 Cuthbertson, A.G., Stoeckel, A.B., & Kreitals, J.E., 1974; Income Levels and Adjustment Patterns in a Rural Community, Bureau of Agricultural Economics, AGPS, Canberra, p.27

24 Cuthbertson, A.G., et al., 1974; p.38 (see note 23)

25 Watson, C., 1987; Full and Plenty; An Oral History of Apple Growing in the Huon Valley, Twelve Trees Publishing Company, Sandy Bay, Hobart, p.57

figures from the Tasmanian Apple and Pear Marketing Authority (TAMA), showed that the grower received only 14% of the London or Hamburg selling price and from that, growing costs had to be deducted. The other portions of income were distributed between freight (52%) and wharfage and insurance (34%).[26] When it is considered that many of the same exporting companies also owned the processing factories for jam and juice making and sold the orchardists sprays and fertilisers, lent them money and owned the mortgages on many orchards, it can be seen that only a very small proportion of the income generated from orchards actually returned to the orchardist. Mr Walker (State Fruit Board) explained the economics of orcharding in 1977, when he said if growers received approximately $10 a bushel from exported apples they could expect to pay $6 of this in freight costs. Export commission and insurance cost 60 cents a bushel and the cost of packing and presenting the fruit was about $4 a bushel. Even with a $2 government subsidy, the grower had a very thin profit margin and small orchardists were particularly affected.[27]

2.6 Henry Jones - IXL

A good example of the control exercised by big companies on the industry can be found in Henry Jones, IXL Company. Henry Jones had its beginnings in jam making in Hobart and by the 1920's with jam factories in Melbourne, Sydney and Adelaide it had a virtual monopoly of jam making in Australia. It was also a major exporter of fresh and processed fruit. It sold insurance to growers and owned large numbers of cool stores throughout the state. It was also involved with the construction of ships and acted as an agent for a large number of British and overseas shipping companies. It was an insurance agent and could handle its own marine insurance for its shipments of fresh and canned fruit. [28] It was a merchant for supplying the orchardist with sprays and fertilisers, it was a financier to the grower, it was an agent for

26 The Mercury, 11/1/78; p.5

27 The Mercury, 28/1/77; p.7

28 IXL, 1966; pp.12-14 (see note 2)

commission salesmen, it was handling fruit on its own account and it was an agent for the shipping companies.[29] It owned timber mills for the making of the wooden cases for export and held many mortgages to orchards in Tasmania. It also owned large acreages of orchards in its own right. In response to the tight stranglehold that Henry Jones held on the industry, growers set up their own co-operatives beginning in the 1920's. The co-operatives set out to perform the same functions as the big companies but for the benefit of the growers. Some of these co-operatives are still alive today although most are in financial difficulty. Good examples are the SPC and Ardmona Co-operatives in the Goulburn Valley and the Riverland Co-operative in Berri, South Australia.

2. 7 Co-operatives

Similar co-operatives were set up in Tasmania and one of the earliest was the Port Huon Fruit Grower's Co-operative Association Ltd. The memorandum setting out the guidelines for the co-operative in 1919, states the business of the company as to

> *...secure, buy and sell, export and otherwise dispose of, or deal with the products of orchardists and fruit growers and to sell to fruitgrowers: manures, sprays and any other materials they required.*[30]

They also provided finance to growers. In 1922, a survey was carried out on the Peninsula by this co-operative with a view to the establishment of a packing shed and by the 1930s it had built three on the Peninsula.[31] Cool stores were built later. These packing sheds and cool stores were sold out in the mid 1960s to another co-operative, the Tasmanian Orchardists and Producers Association.

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29 Watson C., 1987; p.57 (see note 25)

30 The Port Huon Fruitgrowers' Co-operative Association Limited, 1919; Memorandum and Articles of Association, , Hobart, p.3

31 McIntyre, G.N., 1968; p.65 (see note 6)

The activities of this co-operative, according to an annual report from 1937, comprised the following:

> *...merchants, shipping agents, fruit and produce agents, exporters, consignment and general distributing agents, and suppliers of orchardists' and dairymen's requisites.*[32]

The trading policy of the company was co-operative and they were linked as shareholders with the Australian Producers' Co-operative in Melbourne and the Overseas Farmers' Co-operative Federation Ltd. in London. In 1972, they were bought out by Cascades Pty Ltd, a private company.[33]

2.8 A local Co-operative

Neil Noye worked as a manager for the Tasmanian Orchardists and Producers Association, at Nubeena until 1975, when they went out of business.[34] The co-operatives business on the Peninsula included: timber milling, case making, apple packing, cold storage and running a general store. Membership of the co-operative meant that the farmers had access to facilities for the packing and processing (ie canning and juicing) of their crop. Any waste fruit went to pig growers. The co-operative also ran a general store selling sprays, fertilisers and equipment and providing farmers with credit. In its packing shed and timber shed at Highcroft, the co-operative employed over 35 workers.[35]

> *We had casemakers making the boxes. They made the boxes for all over the Peninsula and at one stage we were using mainly local timber.*[36]

32 Tasmanian Orchardists and Producers Limited, 1937-1958; Annual Reports, Hobart, p.5

33 Mercury, 9/9/72; p.19

34 Mercury, 15/6/74; p.4

35 Personal Communication, N. & K. Noye, 17/3/91

36 Personal Communication, N. & K. Noye, 17/3/91

Mr Noye remained as manager when the packing sheds were later taken over by Henry Jones and Clements and Marshall. In total he was a manager of the packing facilities for the period 1968 to 1983 and during that time he saw the number of orchardists they packed for, fall from 33 to 3.[37]

2.9 Agribusiness

In the early 1970s, John Elliot and a young team of management wizards, backed by the CBA bank, bought Henry Jones in the first of a long line of corporate acquisitions. The sale of assets of the company, including fruit processing factories, netted them over $20 million. In recognition of research and development efforts, John Elliot was rewarded by the board of his new company in 1974, by having his initial investment of approximately $5 000 revalued at well over a half a million dollars.[38] But by 1975, in common with the rest of the country, the new management was experiencing problems caused by the decline in demand for Australian exports of fresh and processed fruit. When Britain joined the Common Market it not only reduced its purchases of fresh fruit but also Australian canned fruit. Protected by a 25% tariff barrier, the EEC then began to subsidise European production of fruit and to dump the canned produce on the world market. The Australian fruit canning industry was forced to adjust. Instead of exporting two-thirds of its produce, it had to share out the limited $100 million domestic canned fruit market. In Tasmania, between 1969 and 1986, the number of enterprises engaged in the processing of fruit decreased from 15 to 5. Employment in the processing industry decreased from 556 people in 1969 to 107 in 1983.[39]

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37 Personal Communication, N.& K. Noye, 17/3/91

38 Denton, P., 1986; A Biography of John D. Elliot; Little Hills Press, Sydney, pp. 69-70

39 Australian Bureau of Statistics, 1969-1988; Tasmania Economic Cencuses, Manufacturing Establishments, Hobart.

The long term assessment of Elliot and his management was that manufacturing had a limited future in Australia. IXL sold a large share of its control of the canned fruit industry reducing its share of the market to one-third. Henry Jones IXL went on to become one of the biggest agribusinesses in Australia. By 1987, Henry Jones IXL was known as Elders IXL with an annual turnover of $7 billion.[40] Most of its share in the market was taken up by co-operatives, supported by government. These co-operatives have since been struggling financially. Being co-operatives they could not so easily divest themselves and abandon growers. Today their future is far from secure.

In 1975/76, Henry Jones IXL sold its Tasmanian apple processing interests to Clements Marshall Consolidated Ltd for approximately $1.1 million.[41] Clements Marshall are today one of the biggest Tasmanian owned agribusinesses. In 1988/89 they had after tax profits of approximately $3 million.[42] The company had its origins in 1901 as a firm of produce agents and became heavily involved in exporting apples and pears to the European markets in the early 1930s. By 1964, it was the largest individual exporter of apples and pears in Australasia.[43] Besides extensive interests in packing sheds, cool stores and fruit processing, the company's 1964 Annual Report listed amongst its activities the following:

> *...providing a complete marketing service for exportable apples and pears, importers and distributors of fertilisers and seeds, distributors of pesticides, weedicides and veterinary chemicals, stock feeds and agricultural equipment, agents for leading Australian, Dutch, British and Scandinavian shipping lines, real estate and insurance agents, importers and distributors of all local and imported fresh fruit and vegetables and processors and distributors of apple and pear case materials.*[44]

40 Denton, P.,1986; p.89 (see note 2)

41 Denton, P.,1986; p.99 (see note 2)

42 Clements and Marshall Consolidated Limited, 1989; Annual Report.

43 Tasmanian Country, 17/12/82; p.15

In 1981, it was processing approximately half of the processing crop in Tasmania.[45] Whatever the problems of the Tasmanian apple and pear industry, they would not appear to have greatly affected Clements and Marshall. In 1980/81, the company registered record earnings for the sixth year in succession and record profits continued to be posted throughout the 1980s. In 1988, for example, it reported a 216% jump in net operating profit.[46] In 1989, it invested $4 million in a new orchard in Northern Tasmania.[47]

The loss of the European markets in the 1970s saw enormous structural changes throughout the apple and pear industry. In Tasmania it saw the end of co-operatives and of most small orchardists who had been the lifeblood of the co-operatives. Many of them, already in debt, could simply not afford to undertake the costly changes required of them. With growing levels of orchard indebtedness, the subsidies offered by government for bulldozing orchards, were an attractive proposition.

2.10 Changes in the Orchard

> *During the 1970s, apple orchards were planted more densely to utilise land and sunlight more effectively. Not only that, trees wouldn't grow as tall, making pruning, spraying, thinning and harvesting less time-consuming. The denser orchard also favoured pests. So along came more insecticides to control codling moth. The tractor - pulled spray made its many passes, showering the trees against fungus diseases. Other sprays reduced the need for pruning and thinning, or the fall of fruit, and improved apple colour. Ethephon ripened and coloured them. Bulk handling, grading equipment and cool stores further reduced labour needs, although demanding capital. Fruit for the "controlled*

44 Clements and Marshall Consolidated Limited, 1964; Annual Report.

45 Tasmanian Country, 27/11/81; p.1

46 The Mercury, 17/12/88; p.10

47 Examiner, 21/2/89; p.1

atmosphere" stores could not be picked later than the green-yellow stage, and deteriorated as fast as Dorian Gray when let out six months later.[48]

The continuing answer from agricultural experts, to the problems of the industry has been to use new technology, techniques and chemicals. In 1982, an article in The Tasmanian Country proclaimed that Tasmania was facing an "...*apple industry revolution*", with new varieties, improved growing systems and more effective storage methods. Such changes were the objectives of research and development programs being carried out by the State Department of Agriculture.[49] This apple industry revolution has been transforming orchards throughout the 1970s and 1980s making trees smaller and more densely spaced, apples bigger and orchardists more efficient.

Writing in 1969, a specialist in the Department of Agriculture described the advances in production methods which would lead to a rise in average yields from 500 bushels an acre to 3 000 bushels an acre. It was suggested that these increases could be achieved by the encouragement of dwarf growth, the planting of trees closer together, spray pruning and irrigation. New fertilisers and fungicidal sprays could be used to fight disease.[50] It was claimed that such techniques would cut labour and lower costs. In 1973, it was reported that the Department of Agriculture was advocating higher density production of apple orchards as one of the answers to the problems of the apple industry. Research showed that with higher density plantings yields per acre could be improved by 400%. It was said that more sunlight was admitted and the quality of fruit improved generally, whilst pruning and harvesting were made simpler and labour costs lowered.[51]

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48 Symons, M., 1982; One Continuous Picnic: A History of Eating in Australia.; Duck Press, Adelaide, Symons, p. 247

49 Tasmanian Country, 17/12/82; p.17

50 The Mercury, 7/10/69; p.27

51 The Mercury, 4/7/73; p.29

Spray thinning was a technique which involved the use of the chemical ethephon, sold as Ethrel. It was recommended by the Department of Agriculture to add colour to Tydeman's Early apples.[52] Spray thinning was also urged by the Minister for Agriculture, Dr Amos, to ensure that the fruit grew to the desirable large size. After initial use and disappointing results, the Department of Agriculture recommended some changes, including *"...higher spray strengths, two or three sprayings or earlier sprayings"*.[53]

In 1979, the Tasmanian Government received financial assistance from the Australian Apple and Pear Corporation, to conduct research into the keeping qualities of the State's apple crop. The research was concerned with the calcium impregnation of apples for reducing the incidence of bitter pit. The most susceptible varieties to bitter pit were Cleopatra, Cox's Orange and large Golden Delicious. Calcium dipping was being used in West Australia for Granny Smiths. Diphenylamine was added to the calcium dip tanks.[54] This has since become a widespread practice.

In 1978, there was a reported resurgence in orcharding, particularly for seedling and root stock trees. Well established farmers and larger orchardists were going for smaller, earlier cropping trees, planting on the hedgerow principle. A great deal of research and development was conducted to develop better varieties of trees, particularly of the favoured varieties like Red Delicious and Fuji. Others included the Mutsu, dubbed *"the big apple"*. It was the type of fruit often sold as a special "gift apple" in Japan at a premium price of from $2 to $3 each. Tydemans, an early red apple, was made known to the industry during the early 1970s. More recent releases included the 20th Century Pear, an exotic type from Japan and Lord Lambourne, an early mid season English apple.[55] But it was the Red Delicious which became the

52 The Mercury, 5/9/78; p10,

53 The Mercury, 29/9/79; p.16

54 The Mercury, 19/10/79; p.6

55 The Mercury, 21/4/81; p.16

favoured of them all, the "world apple". In 1982, it was reported that most markets were demanding a large red apple, particularly the improved Red Delicious variety. To meet this demand, the Department of Agriculture was involved in selecting superior local Red Delicious types and importing the best selections available from overseas. In the two years to 1982, more than 200 000 scions of selected cultivars were distributed to orchardists and nurserymen.[56] In 1984, it was reported that Huon Valley growers had their hopes riding on the Red Delicious variety, the "world apple" which sells consistently well everywhere.[57] The top three apples in 1989, in terms of world production, were reported to be: Red Delicious, Granny Smith and Golden Delicious.[58] Of the total number of apples produced in Australia in 1989, 54% were Delicious and 27% were Granny Smith.[59] In Tasmania, in 1990, Delicious accounted for approximately 46% of apples produced and Democrats and Granny Smith for 17% each.[60]

Where formerly it was 10 to 20 years before a block of trees came into production, the time could be reduced in the 1980s to five or six years by using new kinds of root stocks. There was also new theories developing about the management of orchards. Once apple and pear orchards had been looked upon as long term investments, planted out to last for generations. But the modern thinking in the 1980s was to regard an orchard as at the most, a 20-30 year investment with "...*an ongoing programme of orchard replacement to keep pace with the changing market requirements*".[61] Writing in the Tasmanian Journal of Agriculture in 1979, senior horticulturalists put the argument in the following terms,

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56 Tasmanian Country, 17/2/82; p.17

57 The Mercury, 6/3/84, p.12

58 _____ 1990; "The Secret life of the apple", The New Internationalist, No. 212, October 1990; p.16

59 _____ 1990; p.16 (see note 58)

60 Personal Communication with officer of the Tasmanian Department of Primary Industry, 26/3/91.

61 Walker, F.W., and Richardson, B.D., February,1971; "High Density Orchards for Tasmania," in Tasmanian Journal of Agriculture, p.51.

...a programme of continual orchard replacement certainly has practical advantages. In each new planting, the grower can incorporate all the advances in orchard establishment that have taken place since the last planting. He can continually make use of improved budwood (varieties and selections), virus free clones, new rootstocks and new planting methods.[62]

By 1984, it was reported that the apple trees of tomorrow would look more like grape vines and the ripening fruit would be neatly arranged in 'shelves'. The branches would be stretched out along steel and wire trellises to allow ease of maintenance and the possibility of mechanical picking.[63] In 1987, it was found that apple varieties on dwarf rootstocks could grow very rapidly, producing their first commercial crop within three years

New machinery made its appearance in orchards including Hydro lift boom ladders, or "cherry pickers" as they became known. These machines cost cost roughly $10 000 each. As one farmer commented, the cost might appear uneconomical, but "*...orchard labour costs are the killer, and we are cutting our pruning costs by a third*".[64] Cherry pickers were used for pruning trees and to thin and harvest the crop. With two men up on the machines and two on the ground they could cover the same work that six men would do previously.[65]

Sophisticated machinery was introduced to grade, polish and wax apples. The machines cost approximately $200 000 each. Apples were harvested in bulk bins then put in water on their way to grading. The flotation of apples helped ensure "*..bruise free travel*" in the processing stage. From the sorting table the apples were washed, then mechanically lathered in food grade detergent, and washed as they

62 Walker, F.W.& Richardson, B.D., February, 1971; p.51 (see note 64)

63 Tasmanian Country, 27/4/84, p.3

64 The Mercury, 9/8/78, p.26

65 The Mercury, 9/8/78, p.26

passed over brushes equipped with hot water jets. They were then dried by more brushes and blasted with hot air. Apples then entered the waxing section, wax being squirted for one second every 20 seconds. Emerging from a drying tunnel they entered a "singulator" and lined up in eight rows for the final stage - weight grading.[66] In 1981, the National Health and Medical Research Council based in Canberra, recommended to all States that the process of waxing be stopped. Its chief concern was that an ingredient in the wax polish, similar to shellac, did not come within the definition of an edible oil.[67] Waxing is now a common practice.

One final innovation was the introduction of controlled atmosphere stores replacing the old cold stores. Apples held in conventional cool storage needed to be cleared within a month whereas controlled atmosphere storage allowed *"marketing spread over most of the year"*.[68] Clements and Marshall for example built a controlled atmosphere store in 1982, in Huonville. In the same year it was reported that over $7 000 000 had been invested in Tasmania by big growers and companies in controlled atmosphere storage facilities. A further $2 000 000 was invested in new handling and packaging equipment, such as graders and water dumps. [69] With the controlled atmosphere stores, new dipping apparatus had to be installed as all fruit going to the stores had to be first dipped in chemical preservatives.[70] The main chemicals used are Diphenylamine which prevents a 'storage disorder' called 'superficial scald', making the skin of apples turn brown. The scald is caused by the oxidation of the skin on the fruit. The other chemical in use is Benlate, which prevents storage rot.[71] To allow long storage it was also necessary to pick the fruit at the right time. To help the orchardist to more accurately assess

66 The Mercury, 19/3/81; p.16

67 The Mercury, 21/3/81; p.8

68 Tasmanian Country, 27/11/81; p17,

69 Tasmanian Country; 17/12/82, p17,

70 Tasmanian Country; 27/11/81, p.20

71 Interview with officer of Tasmanian Department of Primary Industry, 26/3/91.

ripeness of fruit, a chemical ripeness indicator (ethylene) called 'Snoopy' was reportedly being studied by the Department of Agriculture in 1982.[72]

For the few remaining large orchardists, the answer proposed by experts within the Department of Agriculture and elsewhere was for them to become even larger, to invest more capital in machinery and cool stores, in tractors and irrigation, in chemicals and fertilisers. Orchardists were encouraged by the Department of Agriculture to become even more efficient, to become more specialised, to produce premium varieties, to introduce labour saving methods wherever possible and to become more competitive.

Yet despite the advances in orcharding, the industry has found itself in a state of continuing crisis. In 1979, the problem of overproduction resurfaced in Europe. Export prices were disappointing due to good growing seasons in Europe and the dumping by Chile of large numbers of cheap apples. Many European countries were also expanding their area of orchards and France and Italy were reported as having big surplus stocks of fruit.[73] Consumption had barely increased and annually there was still destruction of large quantities of apples. Grubbing out had been tried before and had not provided the answer. The EEC's solution to the problem was to increase exports and to further cut imports from the Southern Hemisphere.[74] In 1980, the then Australian Minister for Primary Industry reported his disappointment with the attitude of EEC countries in refusing to recognise the need to liberalise international trade. He said that,

> *Through massive subsidisation they are overproducing for their own consumption and for the needs of the EEC itself. Their surpluses are dumped on world markets at costs well below the prices that their own domestic consumers are paying.*[75]

72 Tasmanian Country, 17/12/82; p.17

73 The Mercury, 1/5/79; p.9

74 The Mercury, 14/2/79; p.19

With huge surpluses, the buyers of fruit could afford to be choosy and there were complaints about the quality of Tasmanian fruit. Tasmanian Granny Smiths were criticised for being yellow. There were complaints about bitter pit, and hollow and mouldy core from Sweden. The European trade was reportedly "*...obsessed with quality standards*".[76]

By 1985, it was reported that Tasmania was no longer the "Apple Isle" and in fact ranked as only the third biggest apple producer in Australia, behind Victoria and New South Wales. The fall in apple production was attributed to the fact that Tasmania had hung onto the dwindling export markets, while the mainland States had concentrated on supplying the more accessible domestic market. Tasmania was still the biggest exporter of apples, sending away approximately 12 000 tonnes from the annual crop of approximately 57 000 tonnes. But it was reported that Western Australia could soon pass Tasmania in the export stakes especially in exports to the Middle East.[77]

2.12 Single Desk Marketing

With the declining markets in the 1970s the Australian Government introduced a stabilisation scheme. Growers were provided with financial support of two dollars a box for apples and 80 cents a box for pears. The subsidy was for export of fruit to the "at risk" markets in Europe.[78] It did not apply when overseas prices were good, but when prices fell the scheme provided financial assistance to help the "efficient grower" reach break even point.[79] In return, the Government pressured the industry to improve its efficiency in marketing. In 1971, the Australian Minister for Agriculture told the

75 The Mercury, 22/3/80; p.4

76 The Mercury, 14/2/79; p.19

77 The Mercury, 21/5/84; p.1

78 The Mercury, 5/7/78; p.1

79 The Mercury, 11/1/78; p.5

Tasmanian apple and pear industry that the Commonwealth would not provide freight assistance to growers until they put "*...their own houses in order*". In particular he was calling on them to become more efficient in the handling and marketing of the crop. He advocated the use of containers and handling in bulk to a central store in London.

There was growing pressure on the industry to change to single desk marketing. Traditionally, exports of fruit had been in the control of as many as 20 different licensed exporters. There were many complaints about this system and the wide range of diversity in quality and brand names. Some of Tasmania's competitors for example, New Zealand and South Africa, had single desk marketing where all exports were handled by a single Government appointed board. A consortium of private exporters, named Tasfruit Pty Ltd, received the sole licence for the export season in 1972. But this solution met with little success.

After a disastrous selling season in 1976, when private enterprise exporters failed to sell their produce in Europe, legislation was introduced in 1977 to establish a government appointed authority to control the export and marketing of the apple and pear crop, to be known as the Tasmanian Apple and Pear Marketing Authority, (TAMA). One of its aims was to end market speculation and sales manipulation.[80] It has been argued by some that during its short life, TAMA did give fruit growers a better deal, with the exporters no longer "*...taking the cream*", but TAMA quickly ran into problems.[81] In particular, the big private exporters were antagonistic to TAMA and only gave it their second grade fruit for marketing. It was said that private exporters were shipping their fruit interstate and then re-exporting from Sydney and Melbourne. TAMA was handicapped by the fact that the Australian Constitution allows free trade between all states in the Australian Commonwealth. It was

80 The Mercury, 11/1/78; p.5

81 The Mercury, 15/5/79; p.12

argued by some that TAMA could not work unless it had a monopoly of fruit from Tasmania, but such a monopoly could not be achieved given the Australian constitutional imperative, that trade between the states be free.[82]

In 1978, the Tasmanian Farmer's Federation, attacked what it called "...*quick buck*" operators who were taking advantage of the stability that TAMA had put into the market.[83] In the same year it was reported that 100 000 cases of apples sent to the interstate market in good faith had been re-exported overseas by some mainland fruit merchants with export licences. Despite being destined for the Australian mainland, the cases had received the Australian Governments' subsidy for export. TAMA was gathering information on what it called "pirating" for months in Tasmanian and mainland ports. Apart from the subsidy racket, the Authority's own export packs were found to have been used to ship fruit overseas through the re-export loophole. It was thought that as many as 50 000 of TAMA's own non-overseas marked, "Southern Isle" packs, had turned up in Britain, Europe and Singapore. One cool store in Melbourne was found with thousands of TAMA packs but with the tops changed ready for shipment overseas.[84] By 1981, TAMA's debt resulting from apple exports had risen to nearly $4 million. TAMA became an issue in the 1982 state election, with the Liberal Party calling for its abolition. A number of growers believed that this would lead to the return of what they called the chaotic system of marketing.[85] When it was elected in 1982, the Liberal Party kept its election promise and withdrew financial support. TAMA collapsed. Elders IXL reappeared on the scene seeking sole rights to Tasmania's export of apples and pears. In support of its claim it pointed out that it was already exporting $2 000 million worth of rural commodities a year and had marketing offices in 35 countries. Within Australia it had a national distribution chain putting several

82 The Mercury, 5/9/78; p.14

83 The Mercury, 28/7/78; p.9

84 The Mercury, 4/10/78; p.1

85 The Mercury, 21/5/84; p.8

hundred million dollars worth of food a year into supermarkets across the country. The offer was rejected. In late 1982, a new organisation consisting of six major exporters came into being. The Tasmanian Licensed Fruit Exporters now controls the industry, with the smaller growers heavily dependent on the major companies for everything from packing to marketing.[86]

2.13 Further Problems

A new problem emerged in the 1980s, a problem which threatened Tasmania's exports of fruit and also the health of orchardists and consumers. In 1985, the Tasmanian Apple and Pear Grower's Association recommended that orchardists and their employees should have blood tests to check on the intake of organo-phosphates and in particular for traces of the most common sprays such as Cothion, Gusathion and Parathion. These are sprays used mainly for the control of pests such as the light brown apple moth.[87] In 1986, a University of Tasmania study found that Tasmanian orchardists suffered from a rate of lymphatic cancer twice as high as that of other farmers and this was related to the use of chemical sprays.[88] Also in 1986, two containers of Tasmanian pears shipped to the United States were prevented from entering the market because of excess chemical spray residue levels.[89] In 1987, the chemicals recommended for use as miticides in Tasmanian orchards, Calibre and Apollo, were not accepted by the United States. Any apples or pears with Apollo or Calibre residues were rejected by America. In 1989, there was a scare over the use of the growth regulating chemical, Alar, following the banning of some American apples from South-East Asian markets which had been sprayed with Alar. Alar was used to retain the crispness of the fruit and also in some cases to bring apple trees to flower and crop sooner. The Grower's

86 The Mercury, 21/5/84; p.8

87 The Mercury, 19/9/85; p.3

88 The Mercury, 17/10/86; p.4

89 The Mercury, 27/6/86; p.3

Association was quick to dispel fears saying that the use of Alar in Tasmania was negligible.[90]

There is now also growing concern at the loss of diversity of varieties of fruit. Approximately 6 000 of the 7 000 American apple varieties that blossomed last century are now extinct. There is a similar problem in Europe. Belgium for example, once Europe's top pear breeding country with over 1 000 varieties of pears, now has only three main varieties while six varieties of apples are left where once nearly 600 varieties thrived.[91] The different varieties of apples and pears in the early days were very often "accidents" or gifts of nature, depending on the point of view. This is illustrated by the origin of the two most favoured world apples on the market today, Delicious and Granny Smith. It is said that the modern Delicious had its origins in the 1850s. A Quaker farmer called Jesse Hiatt, discovered a sucker sprouting from the roots of a dead tree. The shoot grew into an apple tree bearing a totally new apple which Hiatt named Hawkeye. He sent it to a fruit show and on biting into one, the judge exclaimed *"...delicious, delicious"*. In 1895 the apple was introduced to the trade as a Delicious. The Granny Smith was discovered in the 1860s in Australia by Maria Anne Smith, the daughter of transported convicts. Her work as a midwife earned her the name Granny Smith. One day in 1868, in her family orchard she found a small tree pushing its way through a pile of discarded fruit. She transplanted it and before long was harvesting the first crop of green apples. When asked how the tree came about she is reported to have said, *"...Well, it's just like God to make something useful out of what we think is rubbish"*.[92]

Varieties of fruit trees are no longer gifts of nature, but under the control of seed companies, agribusinesses and chemical companies. Companies buy genes, store them in gene banks and then patent them. There may be more apples being grown in the world than ever before,

90 Tasmanian Country, 31/3/89; p.1

91 _____ 1990; p.8 (see note 58)

92 _____ 1990; p.23 (see note 58)

but all over the world regardless of soil conditions and climate we are eating the same apples.[93] The old values associated with apple and pear trees have also been lost. They are no longer planted to last generations but as a 20 - 30 year investment. In earlier times in parts of Europe, the apple tree was considered the noblest tree of all, the tree of immortality and before trees were chopped down the axe would be blessed in a ritual of mourning. Modern science has little use for such customs.

2.13 Conclusion.

"Plant pears for your heirs",

(Old fruitgrowers maxim)[94]

Very rarely are the costs of change considered in the continuing scientific and technical revolution and they are difficult to measure with modern economic thinking. How do you value a rural community and its way of life? How do you calculate a gift of nature? How do you estimate the taste of an apple and how do you quantify good health? These questions are difficult to answer and even more difficult as time passes. To know quality needs experience. Memories fade, we forget how an apple tasted and for new generations growing up who only know the modern supermarket apple, an apple is just an apple, it is either red or golden. The apple trees of today are increasingly dwarfs propped up on wire trellises. The trees of yesterday were giants in comparison, growing tall and sturdy, and widely spaced.

On the other hand, the apples themselves have grown bigger. Apples of today are grown with a greater range of chemicals and machinery, and more scientific research and development than ever before. They live a pampered life. They are impregnated, sprayed, waxed and polished to perfection. Indeed in some countries it could be argued

93 _____ 1990; p.5 (see note 58)

94 Benjafield, H., 1914, Unpublished; p.8 (see note 5)

that apples live a better life than the people who pick them. Gone are the small apples and the many varieties of deliciously different apples. Instead we have the Delicious, the world apple. We have standardised apples in a few monotonous, regular sized varieties. Apples are today a part of modern industry and modern agribusiness, and as one commentator observed,

> *To say that apple growing is an industry, is to recognise that apples have become industrial products, alongside tin cans and motor cars. As in factories, the capital stock is being renewed every 25 to 30 years. Productivity depends on artificial fertilisers and chemical sprays. The fruit has to be standardised - as do screws and microchips.*[95]

95 Watson, C., 1987; p.1 (see note 25)

Chapter Three
Dairying on the Tasman Peninsula, 1970-1990.

The mental barrier of milking over 200 cows has been overcome and I am left with the impression that the cows in New Zealand, many of them third or fourth generation cows to be milked this way, have adapted to dairying on a large scale.[1]

Hey diddle diddle, the cat and the fiddle
the cow jumped over the moon.[2]

(traditional nursery rhyme)

3.1 Introduction

Between 1974 and 1989, the number of dairy cattle on the Peninsula declined from 1 130 to 200.[3] In 1990 there were only two dairy farmers left in the municipality. They are the last dairy farmers in a district where dairying was once common and an important part of mixed farming.

From the turn of the century until the 1960s, dairying in Tasmania developed at a relatively sedate pace. It was conducted on a small scale, with many small family farms, many small herds of cows and many small, local factories. In 1900 there were 15 butter factories operating throughout the State. Many of these factories were owned and managed locally. In 1907, there was a small cheese factory at Koonya, on the Peninsula. The district surveyor, Mr Joshua Hinsby, referred to it in his Annual Report, in 1908,

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1 Tasmanian Country, 9/12/83; p.7

2 Opie, I & P., (Ed) 1951; "The cat and the fiddle", in The Oxford Dictionary of Nursery Rhymes, Clarendon Press, Oxford, p.203

3 Australian Bureau of Statistics, 1973-74 to 1988-89; Livestock and Livestock Products, Tasmania, Hobart.

Mr Lacey's cheese factory at Koonya is turning out a good article, but through the winter months he has had to close down, being unable to obtain the necessary milk. This should be overcome when the industry has got a better footing. [4]

By 1915 there was a tendency for farms on the Peninsula to include a greater proportion of dairy cows, with growing towns providing a limited market for milk, butter and some cheese.[5] McIntyre says that in 1921, dairying received a great deal of attention, and with orcharding restricted by limited shipping facilities, dairy herds were for a short time the most profitable venture available.[6] One farmer described this period,

When I was a kid in the 1930s, when the Health authorities decided that everyone had to have dairies to milk the cows in, a lot of people built dairies but they never kept the cows in the dairies. They kept the dairies to show to the Health Inspectors. They used to milk the cows in the yard, they'd have a box or a stool and then we'd go around all the cows and they'd chew their cud and stand in the yard and they wouldn't be tied up at all.[7]

In the 1950s there were between 30 and 40 dairy farms, mainly in the areas of high rainfall, at Port Arthur, Stormlea, Highcroft, Koonya and Newmans Creek. Typically, dairy farms had small herds of 10-15 cows which provided the family with fresh milk, cream and cheese, but also skim milk for the fattening of other livestock. As one farmer described this economy,

A lot of farms would only have say twelve cows and they

4 Parliamentary Papers, No.13., 1908.

5 McIntyre, G.N., 1968; The Alienation and Settlement of Crown Land on Tasman Peninsula. Honours Thesis, University of Tasmania. Hobart, p.58

6 McIntyre, G., 1968; p.63 (see note 5)

7 Personal Communication, A. Briggs, 12/10/90.

would use the skimmed milk to fatten up the pigs. Some of them made butter. Some of them had orchards. So that dairy farming was like a sideline, just to keep the pot boiling.[8]

The modernisation of dairying in Tasmania and the Tasman Peninsula began in the late 1950s and early 1960s and the pace of change has not diminished since. The crisis of world overproduction, described as "milk lakes" and "butter mountains", was already apparent by the mid-1960s. The industrialisation of dairying in many developed countries produced massive quantities of milk, far more than could be consumed in the developed world. When Britain joined the EEC in 1973, it sounded the death knell of the dairy industry as it had been. The pressures on small farmers to leave the industry intensified.

Restructuring in the Dairy industry also saw the closure of many small factories. A report in The Examiner in 1969, announcing the closure of the last Southern butter factory, Heritages, said there had been 160 dairies supplying cream at the time of closure.[9] Speaking of Heritages, one farmer said,

Heritages were a proprietary company and any profits they made they kept and they never passed them on to the farmers. And the farmers got sick of it. We tackled Heritages over it and they said they would close down.[10]

Following this closure, dairy farmers from the Peninsula and the Huon investigated the feasibility of setting up a co-operative. It was decided to send the cream by train to a co-operative in Deloraine.

We had 150 dairy farmers turn up at Hadleys Hotel in Hobart. They wanted to set up a co-operative. We decided we could send the milk to a co-operative in

8 Personal Communication, A. Briggs, 12/10/90.

9 The Examiner, 19/11/69; p.36

10 Personal Communication, A. Briggs, 12/10/90.

Deloraine by train. We got onto the Minister of the day and he put a refrigerated van on the train so all the cream from Southern Tasmania was going to Deloraine For the first time in our lives we were getting a good return for our cream, it was a co-operative you see and the profits came back to us. But really we weren't in the race down here because we had to cart our cream all over the countryside, before it even got to the train.[11]

Despite the massive exodus of farmers, the quantities of milk being produced today have only slightly decreased since the record levels of production in the late 1960s. The value of dairy products in the Tasmanian economy has risen and the profits of major milk manufacturers, have remained healthy. The dairy industry has not so much declined in the last thirty years, as undergone a revolutionary change.

With dairy farming now there is big money involved. It is only companies and family concerns that have sufficient equity that can carry on. There is not much hope for the young people. The old days of mixed farming are gone, it's too labour intensive and you can't cope anymore even with modern machinery. Things change so rapidly. Once upon a time it was just milk, now you have all these different grades and it's very competitive. If you want to make the money you have to be at the top of the pool. There used to be just as much work to do, it took as many hours, but it was more relaxed, I think. Today you have to be a walking computer. The big dairy farmers in the North-West have to use computers.[12]

A modern farmer typically has a herd of over a 100 cows, and there are also many dairy herds of over 300 cows. By 1980, nearly half of the dairy herds in Australia were 100 or more in size. A third were in the 100-174 range.[13] In Tasmania, the average herd size grew from

11 Personal Communication, A. Briggs, 12/10/90.

12 Personal Communication, A. Briggs, 12/10/90.

13 Sargent, S., 1983; Agribusiness in Australia and Australian Agribusiness in the

approximately 70 to 110 between the years 1978-1990 and in 1990, there were over 17 dairy farms with more than 300 cows.[14] Where previously, a good "milker" could milk eight cows in an hour, modern farmers require large automated dairy sheds which allow one or two people to milk over 200 cows or more, in an hour. The modern cow produces twice as much milk as its ancestors of only 40 years ago. In Tasmania in 1951, the average annual milk production per cow was 1 900 litres. By 1990, it was 3 700 litres.[15]

There has also been a change in the most favoured varieties of cows. When cream was the major dairy product, the dominant breed was Jersey. But today with the change to wholemilk the most commonly kept dairy cattle are Freisians or Freisian-Jersey crosses.[16] The quantity of manure coming from the modern dairy is so great that effluent ponds are required to prevent the manure polluting the environment. This became a problem for instance, in the Rubicon River, due to the high concentration of dairy farms around Deloraine, in the north of Tasmania.

3.2 Town Milk Supply - The Rise of Baker's Milk

> *The Tasmanian Milk Company had set up after the Second World War and they used to come down to the Tasman Peninsula at night and pick up the milk in a Blitz wagon. This old Blitz wagon had gun turrets in it so they would shoot kangaroo or wallabies or whatever crossed the road on their way home. I reckon the milk was nearly butter by the time it got there. They used to come down every couple of days and collect the milk.*[17]

Third World Countries of Asia and the Pacific, Australian Freedom from Hunger Campaign Inc., Canberra, p.11-20

14 Tasmanian Dairy Industry Authority, 1990; Annual Report, p.55

15 Australian Dairy Corporation, 1990; Dairy Compendium; Sydney, p.10

16 Tasmanian Dairy Industry Authority, 1985; Dairying in Tasmania, p.1,

17 Personal Communication, A. Briggs, 12/10/90.

Traditionally for many dairy farmers, the most profitable outlet for their milk had been in the supply of cream to butter factories. Except for those dairies close to towns, the town milk supply had long been considered the "poor cousin" of the dairy industry. It depended on small vendor-producers, in other words, dairymen who milked their cows and then supplied milk by horse-drawn cart to the households in their district. One such vendor -producer was Richard Baker, who like his father and grandfather before him was a milkman in Lenah Valley, a suburb of Hobart. In the 1930s, there were 12 milk vendors in Lenah Valley.

In the early 1950s, the State Government backed, Tasmanian Milk Company, received the contract to supply bottled pasteurised milk to all Tasmanian schools. Under Commonwealth health regulations, milk that had not been pasteurised first, could not be supplied to schoolchildren.[18] Worried that all producer-vendors would have to go to the Tasmanian Milk Company to have their milk pasteurised, Baker decided to convert one of his cow sheds into a small pasteurising factory and in 1951 opened Baker's Milk in competition with the Tasmanian Milk Company. The cowshed, with pasteurising equipment could process 300 gallons of milk daily[19]. He formed a quota system for his suppliers so that each farmer was guaranteed a market for their milk. Hobart's population was rising quite rapidly, milk sales were rising and so did Baker's share of milk sales. In 1952 and 1953, milk processing companies in Hobart, Launceston and Burnie, in fact, all except Baker's, were placed in the hands of receivers. By 1954, he was processing, pasteurising and bottling 3 000 gallons of milk daily.[20] In 1956, Baker's and a small milk processor in Launceston agreed to amalgamate. Baker's Milk now had two milk processing factories. When the Tasmanian Milk Company began to experience financial difficulties a number of producer-vendors switched to Baker's and eventually Baker's won the important school

18 The Mercury, 9/7/64, p.7

19 The Mercury, Centenary Magazine, 5/7/54.

20 The Mercury, Centenary Magazine, 5/7/54.

contract. In 1959, Baker's took over the Tasmanian Milk Company and closed its factory in Hobart, leaving Baker's Milk with monopoly control of town milk supply in Hobart and virtually all of the State.[21] As Mr Baker explained it,

> *I got my foot in the door, then I took over the Tasmanian Milk Company and closed their Macquarie Street factory and that was the beginning of a very successful period. The Milk Board set the price of milk and we had the quota system. The farmers knew what they were getting and could spend money on equipment and expansion. Those farmers who supplied under their quota were reallocated to someone who oversupplied. Then the quota became very valuable.* [22]

However, Baker's Milk itself was soon in financial trouble and was taken over by Metropolitan Dairies, a big Melbourne company which supplied 70% of the fresh milk market in Melbourne.[23] As Mr Baker explained it,

> *I started with very little capital and the development was that fast that I was broke and couldn't pay the tax. I'd developed too fast.*[24]

At the time of takeover in 1960, Baker's Milk was the biggest milk company in the state, with two processing plants, one in Hobart and one in Launceston and one planned for Devonport. Total output was 15 500 gallons daily.[25] It was also involved in the manufacture and marketing of ice cream and frozen foods through a half share in the Tasmanian Ice Cream Company Pty Ltd.[26]

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21 The Examiner, Supplement, 15/8/61; p.8

22 Personal Communication, R. Baker, 7/1/91.

23 The Sunday Sun, 11/11/62, p.6

24 Personal Communication, R. Baker, 7/1/91.

25 The Examiner Supplement, 15/8/61; p.8

26 Metropolitan Dairies Ltd., Annual Report, 1961.

So began a virtual monopoly of Tasmania's town milk supply by one company, Metropolitan Dairies in Melbourne, during which time the town milk supply became a highly profitable business. Baker's Milk, now a subsidiary of Metropolitan Dairies, expanded to become a multi-million dollar empire with milk processing factories in Hobart, Launceston and Devonport and "Dicky" Baker, as he was known became Tasmania's milk king.

Speaking in the House of Legislative Assembly in 1962, Mr McKay MLA, said that *"a monopoly in the milk industry had put Tasmanian dairying on a sound footing"*.[27] There were some dissenting voices to the growing monopoly but they were quickly silenced. In 1963, the Chairman of the Victorian Milk Board, Mr O.R Browne expressed his concern that some people involved in the administration of the Milk Board were also shareholders in Baker's Milk. He was also apprehensive about the activities of Metropolitan Dairies which he described as,

> *...a company well versed in the take-over method and I consider a situation could speedily arise whereby all processing and most distributing could be in the hands of one company.*[28]

Mr Browne was accused in the House of Assembly of being *"biased, incompetent and a liar"*.[29] His report sank without a trace. The Milk Board came under fire again in 1964 when it prohibited the sale of unpasteurised milk within a 16 kilometre radius of Hobart. It was a decision which favoured Baker's Milk and which was primarily aimed at farmers who were selling to alternative outlets like milk bars. One member of the Milk Board moved for the dissolution of the Board, saying,

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27 The Advocate, 1/11/62; p.6

28 Examiner, 6/11/63; p.4

29 The Mercury, 19/11/63; p.3

I feel very strongly that we...(the Milk Board)...should be replaced by a Government appointed Board that will act without fear or favour. [30]

Whatever the arguments for or against, it is certain that the Milk Board assisted the milk processing companies by granting them favourable price increases. In its report to Parliament in 1976, which recommended the establishment of the Dairy Industry Authority, the committee noted the changes in the returns being given to the farmers, factories and vendors involved with the town milk supply, for the years 1964 to 1976. During those 12 years the price rises for milk represented increases of 71% to the farmer, 200% to the processor, 118% to the vendor and 100% to the consumer. When it is also considered that major milk processors like Baker's Milk owned many of the vendor licenses, it can be seen, that the processors were indeed involved in a highly lucrative trade.[31]

3.3 From Family Business to Agribusiness

I raise my hat to every cow and bow to every bull.
(Mr Baker's motto)[32]

A cow is a completely automatic milk manufacturing machine. It is encased in untanned leather and mounted on four vertical movable supports, one on each corner. The front end contains the cutting and grinding mechanism, as well as headlights, air inlet and exhaust, a bumper and a foghorn. At the rear is the dispensing apparatus and an automatic fly swatter. The central portion houses a hydro-chemical conversion plant. This consists of four fermentation and storage tanks connected in series by an intricate network of flexible plumbing. This section also contains the heating plant complete with automatic temperature controls, pumping station, and main ventilation

30 The Examiner, 19/8/64; p.5

31 Parliamentary Papers, 1976; "The Tasmanian Dairy Industry", p.15

32 The Examiner, 11/2/79; p.12

system. The waste disposal apparatus is located at the rear of this central section. In brief the external visible features are: two lookers, two hookers,four standers, four hang-downers and a swishy-wishy." [33].

(Baker's Milk, Newsletter to Employees, 1970)

In the 1960s, Metropolitan Dairies made record profits for six years in a row.[34] They also acquired more companies. In 1961, they bought two bakeries in Hobart and another in 1962.[35] In 1963, a new office block was built in Lenah Valley and two cheese factories in Burnie were purchased, one of which was Lactos Cheese.[36] In 1965, another milk processing factory was built at Devonport and an Ultra Heat Treated (UHT) milk plant was built at Launceston. The UHT plant was built with the aim of exporting to South East Asian countries. Meanwhile in Hobart, a new automatic pasteurised milk bottling line (20 000 bottles per hour) was installed and a bulk pick-up business at Hobart was purchased, bringing Bakers fleet of bulk tankers to seven.[37] In 1967, another bakery was acquired and also a half share in a piggery, Barkers Bacon Pty Ltd. It was intended that the piggery would provide an outlet for whey from the Lactos Cheese factory. In 1967, the parent company of Baker's Milk, Metropolitan Dairies changed its name to Consolidated Foods.[38] It explained the name change in its 1968 Company report....

The past few years have seen a transition from a one product organization to a diversification extending to products such as bread, cheese, frozen foods, and the latest venture of an interest in a large pig raising business. Because of this diversification, the Directors thought it desirable to change the name to one which would more truly present the Company's operations.[39]

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33 Baker's Newsletter to Employees, November 1970; Vol. 1, No.5

34 Metropolitan Dairies, 1960-67; Annual Reports.

35 Metropolitan Dairies, 1963; Annual Report.

36 Metropolitan Dairies, 1965; Annual Report.

37 Metropolitan Dairies, 1967; Annual Report.

38 Consolidated Foods Ltd., 1968; Annual Report.

In 1968 the company acquired another Hobart bakery, R. Spencer Pty Ltd. A new automatic cheddar cheese making plant, (Lact-o-matic), was installed at its Lactos plant; the piggery was expanded with buildings to provide for 800 breeding sows, and the company acquired the franchise to sell 'Ski' yoghurt.[40] In 1971, an order was received from Snow Brand Dairy Products, Japan's largest dairying organisation, to purchase 1 000 tons of Gouda cheese annually from Lactos. Capital works upgrading of $1 000 000 began at the Burnie factory.[41]

In 1976 Consolidated Foods, now the largest milk processors and distributers in Victoria and Tasmania was taken over by J. Gadsdens Pty Ltd for $16 million.[42] Gadsdens at that time were one of the biggest packaging manufacturers in the country, with a turnover in 1977 of $236 million.[43] Baker was critical of some of the decisions of the new Company. He eventually retired and the name of Baker's Milk was changed to Tasmaid. Some said the name change was spite on the part of Gadsdens in response to Mr Baker's criticisms. Some years later, when the company ran into difficulties and debts in its milk division it invited Mr Baker back into the board room to solve its problems with milk. In 1987, Consolidated Foods Pty Ltd was acquired by Southern Farmers Group which in 1987 had a turnover of $633 million and profits after tax of $21 million, an increase over the previous year of 150%.[44] An Adelaide based company, Southern Farmers, already had a major interest in the South Australian dairy industry, and the acquisition of Consolidated Foods added the majority share of the Tasmanian milk market to its existing Tasmanian interests which included Safcol, Cascade Brewing and Four Seasons Hotels.[45] In 1989

39 Consolidated Foods Ltd., 1968; Annual Report.

40 Consolidated Foods Ltd, 1969; Annual Report.

41 Consolidated Foods Ltd, 1972; Annual Report.

42 The Mercury, 21/6/77; p.13

43 J. Gadsden Australia Ltd., 1978; Annual Report.

44 Southern Farmers Group, 1987; Annual Report.

45 The Mercury, 7/3/86; p.3

Southern Farmers was taken over by Industrial Equity Limited, one of the three biggest agribusinesses in the country. Its profit for the financial year 1988/89, was $283 million. In the same year it acquired 100% ownership of the national supermarket chain, Woolworths.[46] In the space of 30 years, the industry changed from a converted cow shed to a small cog in a giant corporation.

3.4 Cans of cream and vats of milk

> *Then when Whitlam came to power you had the Minister for agriculture, Mr Wriedt, saying to farmers they had to get the "Cream out of the can and the milk into the vats".*[47]

The contract system in Tasmania was first introduced by Baker's Milk. With the introduction of the contract system many dairy farmers ceased production, while the remainder began to expand. By the end of the 1960s there were about 12 milk producers left on the Peninsula. Those who stayed borrowed money and increased the size of their herds, built new milking sheds or enlarged their old ones, installed refrigerated vats on their farms and often bought more land to run their bigger herds.

In 1960, Baker's Milk introduced the first bulk tanker. Seven years later there at least 37 tankers on Tasmanian roads. They represented an investment of $1 million and were carting 95% of all milk from farms to factories. The first bulk tankers in 1960 could carry 10 000 litres. Seven years later they were carrying up to 18 000 litres.[48] Farmers were encouraged to change from keeping their milk in cans to keeping them in refrigerated vats. Farmers could keep more milk for longer periods of time in their refrigerated vats waiting for the bulk road tanker. The tankers could collect huge volumes and deliver the milk

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46 Industrial Equity, Ltd., 1989; Annual Report.

47 Personal Communication, A. Briggs, 12/10/90.

48 Baker's Milk, May 1967, Newsletter to Producers, Vol.1, No. 2, pp.3-5

in good condition to the factories. By the late 1960s, at least a thousand farm vats had been installed and they too, were getting bigger. As Baker's trade journal explained,

> *The lead for the future is being given by individual farmers who realise that this is the age of specialisation. Where the installation of a 600 gallon vat two years ago was an extraordinary event, we now have in our group, producers with installed vat capacities of 750, 1 000 and 1 200 gallons.*[49]

Often companies such as Baker's Milk would provide finance for the farmers to buy the vats or rent them to the farmers.

> *The company also helped in the purchase of contracts, it helped with interest free loans to producers to assist with the installation of refrigeration and co-operated with Tasman Peninsula producers to ensure that payloads from this very expensive freighting area are economic...Loans have also been made to help farmers buy cows and concentrate for feeding.*[50]

Investment was put into building new factories for the production of cheese, casein and milk powder products. In the five years between 1962-67, Tasmanian production of milk powder products increased from nil to 2 877 tons. Casein production increased from nil to 1 018 tons and cheese production increased from 633 tons to 4 612 tons. Britain provided a ready market for butter and cheese with roughly 70% of cheese and 83% of butter exports going there in 1960.[51] Between 1950 to 1970, butter production in Tasmania, increased from 5,000 tonnes to 15 000 tonnes. Cheese production increased from 428 tonnes to 5 000 tonnes.[52] Such was the volume of whole milk being supplied that manufacturing companies were constantly on the

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49 Baker's Milk, May 1967, Newsletter to Producers, Vol 1, No.2, pp.3-5

50 Baker's Milk, May 1967, Newsletter to Producers, Vol.1, No.2, p.1

51 Baker's Milk, May 1967, Newsletter to Producers, Vol 1, No 2., p.1

52 Australian Dairy Corporation, 1990, p.18 (see note 8)

lookout for new techniques and new uses for manufactured milk products.

But as early as 1963, there were growing butter and cheese surpluses. In 1961 the Commonwealth Government realised the danger of over-production of cheese and butter, and introduced subsidies to encourage the export of processed milk products including condensed milk, full cream milk powder, infant food and malted milk.[53] Long before the change came with the collapse of export markets in the early 1970s there was an overproduction of milk and dairy products in Tasmania. As Baker's Milk put it in their journal for employees in 1967,

> *It may be considered that with devaluation of sterling and over-supply of dairy produce on world markets, that present trends and investment in our industry should cease. We must resist these temptations. It would be very easy to hold back now, but the dairy industry, as with other primary production, has cycles of greater and lesser profitability. Although some changes in our industry will occur and uneconomic producers and processors may leave the industry, we will find that the next season or two will be ones in which to prepare ourselves for the upturn in demand which will surely come for our products.* [54]

3.5 Exodus

One couple who ran a dairy farm on the Peninsula described how the changes in dairying affected them. They bought a dairy farm of 68 acres in Highcroft in 1958. It already had eight dairy cows.

> *They had an old breed in those days which they called Durham's which were really Shorthorns. They were a strain of beef Shorthorn which were very good milk*

[53] The Mercury, 8/5/1963, p.25

[54] Baker's Milk, May 1967, Newsletter to Producers, Vol.1, No. 2, p.5

producers. They slowly died out for the simple reason that no one was breeding them anymore. They were excellent cows. We had eight of them and a Jersey cow as a house cow. Our neighbour had Devon cross cows which were a bit hardier, because he lived a little bit higher up, which was only about 150 metres, but it makes all the difference. He was in the frost belt. Being on butterfat, we just separated and fed the skim milk to the pigs. We had our own hand separator. Of course, with eight cows it didn't take a long time.[55]

In three years they increased their herd to 24 cows. They borrowed money and bought a milking machine. After Heritages closed down in 1969, they bought a contract from the Milk Board of 20 gallons and one from Baker's for 20 gallons. Gradually they bought more contracts until they were supplying 220 gallons a day. Along with this they bought five neighbouring farms and ended up with a total of 1 200 acres. With another loan they built a herringbone dairy shed and installed a 12 unit milking machine. With this new dairy they could milk a hundred cows in an hour. At their peak they were milking 160 cows. Yet despite their expansion they had difficulty staying on the treadmill. As they said,

We saw too many problems. To really survive we would have had to have re-capitalised. We would have needed a new dairy, a rotary dairy.[56]

Eventually they quit dairying altogether, the dairy shed was bulldozed and four years ago they sold their land to ANM, a forestry company.

Neither size nor efficiency has protected dairy farmers from the economic pressures of the industry. In the end, the great majority of

55 Personal Communication, H. & E. Kerstan, 26/10/90.

56 Personal Communication, H.& E. Kerstan, 26/10/90.

them could not afford to continue. The crisis became acute when Britain joined the EEC. The Henderson poverty study of the mid 1970s revealed a very high incidence of chronic poverty amongst dairy farmers who produced for the export market.[57] One survey undertaken by sociologists from the University of New England revealed that dairy producers had the lowest income level of any Australian farm group and that many were in severe distress.[58] In the mid 1970s, half the dairy farmers in the State left dairying.[59] They dropped out, diversified into beef, started working part-time or in some cases sold their land

In Australia from 1960 to 1980, the number of dairy farms fell from 117 869 to 26 025. In other words over 80% of Australia's dairy farmers were removed from production.[60] The number of registered dairy farms in Tasmania fell from 2 146 in 1976 to 880 in 1990. Many of the farmers leaving

> *were extremely small and inefficient: conforming to the caricature of 'hill-billy' farms. But the massive structural changes which have taken place can not be fully explained by this connotation of inefficiency.*[61]

The reasons for the exodus of dairy farmers from the industry were quite simple, most dairy farmers could no longer afford to stay on the treadmill of increasing costs associated with technological change and rising productivity or the decreasing returns from the sale of their milk. They were squeezed by a combination of government restructuring schemes and the major milk manufacturing companies.

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57 Lawrence, G., 1987; Capitalism and the Countryside: The Rural Crisis in Australia, Pluto Press, Sydney and London, p.19

58 Lawrence, G., 1983, p.19 (see note 57)

59 The Tasmanian Country, 13/7/84, p.7

60 Sargent, S., November 1983, p.11-5 (see note 6)

61 Sargent, S., November 1983, p.11-5 (see note 6)

3.6 Manufacturing Milk

To speak of the decline in dairying is slightly misleading, because dairying has continued to be a profitable and growing industry for the major milk manufacturing companies. In the twenty year period from 1960 to 1980, there was a compound increase of approximately 100% in the unadjusted gross value of dairy products in Australia. [62] During the last 30 years the milk manufacturers have become fewer and bigger. Through the process of takeover and amalgamation, family businesses were bought and either modernised or disposed of. The total number of factories engaged in manufacturing milk and milk products in Tasmania declined from 30 in 1969 to 12 in 1987 and there was a corresponding decrease in employment from 867 to below 600.[63]

Today approximately a third of all milk produced in Tasmania is consumed as milk, the remainder is manufactured into a wide range of products. In 1989 the farm gate price for manufacturing milk was only 24 cents a litre compared with 39 cents for fresh milk. Manufacturers pay very little for their manufacturing milk, yet it is the manufactured milk products which are the most profitable. Yoghurt, for example, had a retail value of around $30 million in 1979 and a healthy market growth of 15-20% a year. The cottage cheese industry was another growth area increasing at around 20% a year. Other products such as flavoured milk have done well and the cheese market has also been growing, mainly due to increased exports. Japan is the largest buyer importing about one quarter of all Australia's cheese exports. The skim milk market in Asia has also been growing.[64]

The major milk manufacturers can pressure governments and farmers alike with the threat that unless they are able to buy their milk for manufacture at a cheap enough price then they will buy their milk

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62 Sargent, S., November 1983, p.11-6 (see note 6)

63 Australian Bureau Statistics, Tasmania - Economic Censuses, Manufacturing Establishments, 8202.6

64 Sargent, S., November 1983, p.11-7 (see note 6)

elsewhere. With a competitive world market this threat is quite real.

The effect of successive government restructuring schemes since the late 1960s has been to redistribute farm resources among fewer farms. In the late 1980s, Primary Industry Minister, John Kerin introduced a new rationalization scheme which provided about $40 million for adjustment assistance in order to reduce farm numbers by 5 000.[65] As one writer has described the successive rural reconstruction schemes,

> *While the schemes provided a measure of welfare assistance, they were primarily used as an economic lever to dislodge the low-income producer from agriculture.*[66]

Australian farmers continue to compete in overcrowded markets with some of the worlds most highly subsidised dairy farmers. In 1989, for example, dairy farmers in the USA received a farmgate price of 50 cents ($A) per 100 kg of milk. Farmers in Sweden, received 63 cents and in Switzerland, it was 80 cents. The average farmgate price for farmers in the EEC was 43 cents compared to 28 cents in Australia.[67]

Phillip and Anne Hallam began working their dairy farm on the Peninsula 11 years ago in 1979. The farm originally belonged to Phillip's grandfather. For the first five or six years they milked 70 cows but have since built up to 170 cows. They are now the biggest dairy farmers on the Peninsula and won a dairy farmers award in 1989. With a bigger herd they had to take out a loan to extend their herringbone shed, from 5 a side to 22 a side. They also had to have three vats to keep the milk in, which are valued new, at approximately $20 000 each.

All of Southern Tasmania is supplying Tasmaid.

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65 Lawrence, G., 1983, pp.193-4 (see note 57)

66 Lawrence G., 1983, p.194 (see note 57)

67 Australian Dairy Corporation, 1990, p.40 (see note 8)

Tasmaid are the only ones we can supply. There are no other companies down here, we haven't got a choice. The tanker comes down here every second day. Thats the other reason forcing us to get a lot bigger. We had to prove that it was economically viable to send a tanker down here. For small amounts of milk you see it just wasn't viable for them, we were at the end of the line. So we had to make a decision. Do we get out or do we get bigger? It was a matter of having to, it's only the bigger people who can survive in the economic climate these days. You have to be big, it's a business. And you don't have a choice, if you're not big you don't survive and you've got to be able to keep up. We're big enough now for the tanker to come.[68]

Dairy farmers are still faced with the same choice of "get big or get out". The cost price squeeze is still in operation and the exodus of dairy farmers continues. Between 1981 and 1985 for example, Tasmania lost 17% of its dairy farms. In the 1986-87 financial year, approximately 25% of Australia's dairy farmers were recording negative farm incomes.[69]

3.7 Conclusion

I went through the DDT stage and used all the poisons, just like most farmers did. But one year we had no money to buy the superphosphate. For three years we couldn't afford to. The pasture looked neglected and the weeds had taken over. An organic farming expert from South Australia heard about our place and visited the property. He asked me a simple question: "Haven't you noticed something? Your stock, aren't they healthier?" It wasn't until then that I realised he was right. Animal health had picked up dramatically - footrot and mastitis had gone - and nature was making its own repairs to the soil. He persuaded us to put on dolomite instead of

68 Personal Communication, P. & A. Hallam, 23/10/90.

69 Lawrence, G., 1983, p.19 (see note 57)

superphosphate that year and we've never looked back.[70]

Alternative methods of dairy farming receive little government support and in comparison with the huge amount of research and development being poured into biotechnology remain largely unexplored and unfunded. Ray Mason in Penguin is one of Tasmania's few bio-dynamic dairy farmers. He does not use artificial fertilisers and believes that,

> *Superphosphate is not harmful, but it is the plant's imbalance, that is. The plant can't drink water without taking in the phosphorus, then the plant gets too much, it becomes weak, gets bugs and has to be sprayed.*[71]

On the other hand he has found weeds to be useful in balance with the pasture, and are useful as they bring minerals to the surface of the soil. They are also beneficial for cattle as roughage. [72]

Following a three month inspection of European dairies in 1983, Mr Milan Vyhnalek, a leading cheese maker in Tasmania, described some of the problems of modern European dairies. He said that the over-use of chemicals and industrial pollution was having a detrimental effect on vegetation in many countries and many previously unknown diseases had emerged. Farmers were finding that their pastures were developing diseases not unlike cancers and this grass was then being eaten by cows.[73]

In 1990, in the United Kingdom, it was known that drug companies were sponsoring trials on test dairy herds using Bovine Somatotropine(BST), a growth hormone which is injected into cows to increase their milk yields. Recently the London Food Commission revealed that milk from cattle given BST had been added to the

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70 Tasmanian Country, 4/12/87, p.15

71 Tasmanian Country, 4/12/87, p.15

72 Tasmanian Country, 4/12/87, p.15

73 Tasmanian Country, 9/12/83, p.7

national milk supply, despite BST not being approved for use. BST is produced by four multinational companies: Elanco, Monsanto, Cynamid and Upjohn, whose investment in the research and development of BST has been considerable. Their anticipated return is a share of the predicted $1 billion global profits.

BST can boost yields by up to 20% but only if injected into animals at regular levels, usually once every two weeks. But BST can have adverse effects on cow health and welfare, causing: tender swellings on the injection site, fertility problems and increased embryo loss, increase in mastitis, increase in the incidence of lameness, failure to gain weight and loss of body condition. BST is the first of the new biotechnical generation. It is a test product for the pharmaceutical industry and if its use is authorised in Europe, it will lead to a whole series of new hormones for pigs, poultry and fish. The EC has yet to decide whether its use should be authorised or banned.[74]

In 1984 a group of four business executives calling themselves Molera Pty.Ltd applied to the Cranbourne Shire, near Melbourne, for a permit to build an intensive dairy feedlot complex. The same group of businessmen, this time under the name of Freehold Rural Estates Pty Ltd, had also applied to the City of Berwick, near Melbourne, for a permit to establish a 1 000 cow intensive dairy factory there as well.[75] Following is a description of a feedlot complex,

> *One thousand cows would be permanently housed on concrete to produce milk. There would be a very small area within the shed covered with dried manure for a resting area. Twice a day the cows would take the short walk along the covered walkway to the attached milking shed to deposit the product.*[76]

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74 _____ "BST- A growing concern", July 1990; Green Magazine- For our Environment, London, p.3

75 _____ March 1984; "Battle against intensive dairy", Outcry, : Melbourne. p18.

76 _____ March 1984; p.18 (see note 75)

Already overseas there are far more intensive forms of dairy production. Some dairy farms in the US now use a "uni-car system", where the cow is kept permanently in a wire cage on wheels and rolled back and forth to the milking shed - energy not used for walking can be used to produce more milk.[77]

What is likely to happen to dairy farming given the situation of domestic and world oversupply? If current trends are used as a guide it would seem that governments will continue to seek reductions of dairy farm numbers to allow those remaining, to increase their market share and so remain viable. There will be the continuing disintegration of traditional dairy farming and the development of superfarms capable of purchasing and utilizing new technology, including bio-technology. There will be the culling of "inefficient" dairies and "uneconomic cows". Fewer cows will produce more milk, fewer farmers will milk more cows, and a fewer companies will grow bigger. And there will be very few of the small dairy farmers left for whom dairying was not just a business, but also a way of life.

> *At my stage of life I'm content to keep doing what I've always done. I like the lifestyle. Once the bloody birds wake up in the morning, if they're not making a noise I get out and wake them up. I've gotten used to it. I couldn't think of a better way of life, speaking personally, that is.*[78]

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77 _____ March 1984; p.18 (see note 75)

78 Personal Communication, T. Purdon, 12/10/90.

Chapter Four
Poultry on the Peninsula
1970 -1990.

> *I can still remember my Aunt giving me a black chook on my second birthday. Chickens are wonderful things. I've been breeding poultry all my life. At one stage the Tasman Peninsula was the only poultry growing area in the State. When I say only, I mean we had the hatcheries and the breeding stock and our breeding stock were better than our competitors. Even when we sold to Inghams. The breeding stock were the key to the whole thing. And we used to sell our stock to anybody, we didn't turn anybody down even if they were competitors or not. We had people coming from Provincial Traders in Queensland, wanting to buy our stock. But they wanted huge quantities and it just became too big for us. The industry was moving so fast. Production was nearly doubling every year and veterinary knowledge wasn't keeping pace.*[1]

4.1 Introduction

Over the last 25 years, the Peninsula has become the most important poultry producing area in Tasmania. A processing industry began as a family business and became a thriving locally owned industry which at its peak was employing over 100 people in the late 1960s. But in the early 1970s the business was taken over by Inghams who required farmers to adopt newer intensive methods, involving bigger, more costly sheds, more birds per area and fully controlled atmospheres. Those farmers who could not meet the expense dropped out of the race and the number of chicken farmers has declined in the past 20 years from approximately 25 to 14.

The poultry industry is divided into two parts: the poultry for meat industry (broilers) and the egg producing industry. In Tasmania in

[1] Personal Communication, K. McDonald, 30/1/91.

1985, the broiler industry was worth approximately $8.6 million while the egg industry was worth approximately $5.9 million.[2] This chapter will focus only on the poultry for meat industry as this has been an industry of major importance on the Tasman Peninsula.

As with many other western countries, consumption of poultry meat in Australia has increased dramatically in the last 30 years. This increase has been helped by the greater acceptance of poultry by consumers because of its low cholesterol, low kilojoule and high protein content, its relatively low price and convenience.[3] Australian per capita consumption of poultry increased from 5 kgs a year in 1960 to over 22 kgs in 1981.[4] Between 1964 and 1986, the number of poultry slaughtered annually in Tasmania, increased from approximately 750 000 to nearly 4 500 000.[5] During this time the poultry meat industry both in Tasmania and Australia, has become increasingly controlled by large Agribusiness. In 1977/78 in Australia, the total pre-tax turnover of the chicken for meat industry was $354 million and half of that was shared between the top four companies.

Since 1977/78, ownership of the industry has become further concentrated and today is controlled by two companies, Inghams and Amatil. Inghams controls approximately two-thirds of the industry.[6] The agribusinesses have brought with them revolutions in technology so that the "chicken shed" of today closely resembles a factory. The modern industry depends on manufactured feed, genetically selected birds and highly controlled environments. The controls include regulated temperatures, and in some cases though not all, growth

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2 Australian Bureau of Statistics, 1969- 1986; Miscellaneous Indicators of Tasmanian Productive Activity.

3 Dover B., October 1985; "Chickens are big business", Animal Liberation, p.7

4 Sargent, S., 1983; Agribusiness in Australia and Australian Agribusiness in the Third World Countries of Asia and the Pacific, Australian Freedom from Hunger Campaign Inc., Canberra, p.13 - 1

5 Australian Bureau of Statistics, 1969- 1986; (see note 2)

6 Sargent, S., 1985; The Foodmakers, Penguin Books, Ringwood, Victoria, p.138

promoting chemicals and sensory deprivation. Most producers or "growers" as they are termed, receive day old chicks from the company and return the chickens seven weeks later to be 'processed'. A typical contract grower in Australia, houses 40 000 to 60 000 birds per batch and supplies between 200 000 and 300 000 birds to the processing company every year.

In Tasmania, Inghams controls approximately 90% of the poultry meat industry.[7] It is difficult to get information about Inghams as it is not a public company and does not make its annual reports public. It is known, however, that in the process of building its empire it has progressively taken over many companies which started out as family businesses. Such family firms include; A.A.Tegel, Murray Land and the poultry interests of Provincial Traders which it bought from Henry Jones IXL. Inghams also has two of the most lucrative supply contracts for chickens with Kentucky Fried and Woolworths.[8] Until 1987, it did not trade under its own name and operations were carried out through a subsidiary, Golden Poultry, which it half owned with Amatil. In 1987, Amatil sold its 49% share to Inghams leaving Inghams as the sole owners of Golden Poultry. Inghams own the hatchery on the Peninsula which hatches approximately 4 000 000 chicks a year. It supplies three of its own company farms in the Sorell district and the growers on the Peninsula with hatched chicks which they grow under contract. On each of the three company farms there are approximately eight sheds, so that Inghams owns approximately 24 sheds which are slightly bigger than the sheds of the contract growers. Inghams also owns a feed mill at Longford and a processing factory at Sorell.

4.2 Beginnings

One family closely associated with the poultry industry on the

7 Personal Communication with Ingham's employee, 21/2/90.

8 Sargent, S., 1985, p.54 (see note 5)

Peninsula was the McDonald family. Originally from Scotland, they settled at Premaydena in the 1930s. They named their farm after their village in Scotland, "Glenila". Like many other settlers they had a small mixed farm with orchards and some dairy cows and chickens. Ken McDonald was fascinated with chickens as a boy and after finishing school he decided he wanted to grow chickens purely for their meat. The normal practice until then was to raise chickens for their eggs and only when they became too old would they be killed for their meat. He began experimenting in the 1950s trying to produce a bird that would be killed for meat alone. He used the breeds available: Sussex, Rhode Island Reds, Indian Game and White Leghorns. Within 10 years his chickens were setting standards in Australia for their rapid weight gain. They put on 1.4 kilograms in nine weeks and at that time in the 1960s, this was unheard of. Today chickens reach approximately 2.4 kilograms in seven weeks.[9] With its good breeding stock and growing consumer demand the Peninsula had a sound basis for a thriving local enterprise. The McDonald family established a factory at Premaydena and at its peak their Glenila company was itself employing over 40 people.

There were approximately 25 farmers with chicken sheds in the late 1960s. The first chicken sheds were comparatively small and natural ventilation was used. If they housed 9 000 chickens, the sheds were considered large. Today they house twice as many. The basic feed was composed from wheat, meat, vitamins and minerals. Some antibiotics were used but growth promotants were not in general use.

4.3 Change

Golden Poultry was originally a Melbourne family business supplying fresh chickens to the Melbourne market but they were taken over by Inghams in 1965. Through their new subsidiary Inghams then acquired Glenila Poultry. Before they were taken over in the 1960s, Glenila Poultry supplied Kentucky Fried Chicken with fresh chickens

[9] Personal Communication with Ingham's employee, 21/2/90.

for a short time until Inghams were given the contract. As Ken McDonald said,

> *Then we were forced into a situation of either selling to Inghams or having outright competition from them. We didn't really have any option but to sell.*[10]

The resulting changes for the farmers on the Peninsula were important. Inghams demanded that they adopt new farming techniques or get out of the business. It was a time to either "grow or go". The changes included building sheds that could house more chickens at higher density. Natural ventilation was replaced by a "controlled atmosphere", which required fans, insulation and shutters. One farmer said of the changes,

> *Inghams wanted completely controlled environments which took a lot of extra money. To update a shed became very expensive. I'm quite sure they don't grow any better chickens but still it was the "in thing" at the time.*[11]

Another said,

> *They had to put cement floors in and they had to have the inside sprayed with insulation and that was always $4-$5 000 dollars more per shed. Then Inghams wanted more chickens, so everyone extended another 20-30 extra feet onto their sheds. Then they had to be all steel frames. The wooden frames came out, steel frames went in and in the end those sheds were worth roughly $70 000. What if you wanted to build a new one?* [12]

Today a chicken shed is worth over $200 000. Inghams also introduced a more competitive contract system requiring farmers to compete with

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9 Personal Communication with K. McDonald, 30/1/91.

11 Personal Communication with K. McDonald, 30/1/91.

12 Personal Communication with H. & E. Kerstan, 26/10/90.

one another. Those that were more efficient were paid better prices.

> *At that stage Inghams had a totally different approach. They were a company paying purely on performance. The emphasis was on the growers to succeed in competition. They developed an average price that they paid per chicken, but if you did better than your base then you were doing better than the people on the bottom and taking it off them. So you probably had a 40% variation between your top and your bottom growers. The top ones were making a heap and the bottom ones were going broke. The middle ones were making the same as we were paying them. There's no doubt that Inghams were right, but in a community it had been done as a family sort of thing and you didn't operate that way. Basically everybody did alright out of it and everyone was happy. When Inghams took over the whole scene changed, it was controlled from Sydney and you had to become more competitive and a bit more modern.*[13]

In the early 1970s, the old Glenila poultry processing factory at Premaydena was burnt down and a replacement was built, not on the Peninsula but at Sorell. Farmers were afraid that the growing sheds would also move to Sorell and that they would lose them. They set up an organisation to defend their interests called the Tasmanian Poultry Growers Association. The President, Mr N. Noye, met with the Minister for Industry in 1973 and said that the growers were concerned about the loss of the factory and the possible running down of the industry generally on the Peninsula.[14] He said,

> *The district had become dependent on the industry to provide employment for about 100 people, and help stem the flow of the rural population to the city.*[15]

The initiative to set up the Growers' Association came from the

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13 Personal Communication with K. McDonald, 30/1/91.

14 The Mercury, 1/8/73, p.2

15 The Mercury, 1/8/73, p.2

farmers on the Peninsula and was directly related to the loss of local control of their industry. Negotiations were no longer personal or face to face. Instead decisions were made in head offices in Sydney. The association became a kind of union to negotiate with the company. As Mr McDonald recalled,

> *...at that time there was a fair bit of a stand off, the growers were not used to being dictated to and Inghams wanted to give them a bit of a lesson.*[16]

In 1973, the growers met with the Tasmanian Minister for Industrial Development to inform him that they had progressively taken cuts in their returns in spite of rising costs.[17] In 1976, the Association met with the Minister for Agriculture to press for legislation to provide for an independent arbitrator to settle disputes between the farmers and the companies. It was reported that the Growers Association had sought a price rise of 19 cents a pound for each broiler supplied but had received only 13 and a half cents, a price rise of 1 cent.[18] Mr Peace , the then president of the Growers Association, said it was felt that a higher price would have been justified to allow producers to cover the cost of upgrading poultry sheds.[19] The response from Golden Poultry was that farmers should improve their productivity rather than *"worrying about the price"*.[20] There are still some fears today that growers will not have their contracts renewed because they do not have a binding agreement with Inghams and their security is dependent on the renewal of contracts on a yearly basis.

On the Peninsula in 1991, there are approximately 14 farmers "growing" chickens. Of the original 25 involved with Glenila, only four are left. The other current growers are people who have bought into the business recently and quite a number of sheds have changed hands

16 Personal Communication with K. McDonald, 30/1/91.

17 The Mercury, 1/8/73, p.2

18 The Mercury, 20/1/76, p.11

19 The Mercury, 20/1/76, p.11

20 The Mercury, 20/1/76, p.11

three times or more in the last 20 years. Those farmers who have paid for their sheds "make a living" but for those who are paying their sheds off on loan, there is constant financial pressure. There is also increased pressure on farmers to improve productivity. Instead of four batches a year, a farmer must now have six batches of chickens go through the shed every year, from day old to seven weeks maturity.

Ken McDonald left the poultry industry in the 1970s. He said that,

> *...the fun went out of it in the 1970s when big business started to get involved. I left basically because of that. I made my decisions on the basis of experience but with the change I was always in conflict with academics in Sydney who were making arbitrary decisions about how the farm should be run. I disagreed with that, rightly or wrongly. I'm not saying I was right. But I had grown up with it.*[21]

4.4 Problems and Prospects

The Environment Protection Advisory Council has described the different poultry production methods as follows:

> *Free range system - Birds have access to paddocks or runs, and housing is either of a permanent fixed nature or of movable sheds.*
>
> *Semi-Intensive - A housing system in which the birds have access to a confined area.*
>
> *Intensive - A system of poultry keeping in which the birds are totally confined to the house. All services are brought to the stock.*
>
> *Controlled environment - Intensive conditions for poultry where the operator has complete control of heat, light and air supply. All services are brought to the*

[21] Personal Communication with K. McDonald, 30/1/91.

stock.[22]

Forty years ago, most chickens were raised under free range conditions. The move to highly intensive farming is therefore a recent phenomenon. There has been increasing conflict over the intensive methods used in modern poultry factories. Animal Liberation is one organisation which has repeatedly raised the issue of the cruelty caused to poultry by overcrowding and other problems associated with intensive farming. There has also been a great deal of publicity about the "battery farming" methods which apply to the egg industry.

There is evidence to suggest that the number of diseases amongst chickens under intensive farming conditions has increased and there is much evidence to suggest that disease is caused by the overcrowded, unnatural environments and the fact that the birds natural behaviour is frustrated. They cannot walk around, scratch the ground, dust-bathe, build a nest see daylight or stretch their wings. The modern answer to disease is generally by the use of drugs.

In 1985/86 approximately 258 million chickens were slaughtered Australia wide. Approximately 4% of chickens died or had to be killed before reaching slaughter weight. In other words approximately 11 million birds could not survive the seven weeks it took to reach maturity.[23]

Late Respiratory Disease is one of the major problems, with the signs usually appearing when the flock is over 30 days of age. It generally starts as a mild cough which becomes severe, with a discharge from the nostrils and eyes, poor feed intake, growth depression and, in some cases, spectacular mortality. Coccidiosis is another major problem.

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22 Environment Protection Advisory Council: Intensive Animal Husbandry Subcommittee, May 1979; Guidelines for design and operation of Intensive Animal Husbandry Units, Department of the Environment, Hobart.

23 Pope, S., 1989; "Chicken: What the Colonel doesn't tell the customers", Animal Liberation Magazine, No. 29, July-September, p.8

Inclusion body hepatitis is a disease which can cause heavy losses in sporadic outbreaks. Leg weakness, the acute death syndrome (heart attacks) and big liver spleen disease collectively result in losses of over $11 million worth of chickens a year.[24] One study in Western Australia found that 1 500 birds in one flock died due to heart attacks before the age of seven weeks. Apparently healthy and well grown birds suddenly go into spasms and flip over onto their backs, which is why the condition has also been called 'flip-over' disease. Some researchers have linked this heart failure with the rapid growth rates of the chickens. Rapid growth rates are also linked to the problems of skeletal deformities, including: crippling, bent and twisted legs and toes; slipped tendons; deformed spinal vertebrae and arthritis.[25]

Respiratory problems are not only a problem for the chickens but also for the farmers. The Department of Community Medicine at Melbourne University studied health problems amongst poultry farmers and found that 70% suffered from sore eyes, 28% from regular coughing, 15% from asthma and 14% from chronic bronchitis. It found that chicken sheds were controlled atmospheres full of contaminants including dust, gases, micro-organisms and chemicals. The report advised chicken farmers to spend as little time as possible in the sheds and to wear respirators.[26]

Concern has also been expressed by health authorities and consumer organisations about the use of antibiotics as "growth promotants". Health and agricultural authorities are unsure what the proportion of antibiotics sold in Australia is being used as veterinary and growth promotants. Some experts believe that anywhere between 10-50% of all antibiotics sold are used in animal production.[27] Almost all commercially raised poultry in Australia are fed antibiotics at some

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24 Pope, S., 1989; p.8 (see note 22)

25 Pope, S., 1989; p.8 (see note 22)

26 Pope, S., 1989; p.9 (see note 22)

27 _____ 1985; "Antibiotics and you", Choice; Journal of the Australian Consumers Association, December 1985, pp.15-19, p.20

stage in production and 85% carry bacteria resistant to at least one antibiotic used in human medicine. Some commercial stock feeds also have antibiotics in them. It is said that the danger to the whole community grows as more antibiotics are used. As more resistant bacteria appear in the community, the less effective antibiotics become. There is the danger that the community could then suffer outbreaks of infections which medical science would be unable to control.[28]

Another problem associated with modern intensive farming methods and one that has surfaced in Tasmania, is the death of large numbers of chickens during heatwaves. In January 1991, 70 000 died at Inghams poultry farm at Campania near Hobart. The chickens died when the air-conditioning failed during heatwave conditions. It was described by the RSPCA as an *"unfortunate accident"*.[29] Such accidents would seem to be integrally linked with intensive farming. Almost 20 years earlier on a hot January day in 1973, more than 20 000 hens and pullets were reported as being *"...cooked alive"*.[30] Worst hit was Glenila which was then under the control of Golden Poultry and had recently changed from natural ventilation to controlled environments.

One final question concerns the taste of the "modern" chicken and the growing suspicion that it does not taste as good as the old backyard variety. This is difficult to prove and there are no available statistics to prove an argument one way or another. Ken McDonald who still breeds chickens, offered one opinion,

> *I like the taste of backyard chooks because they haven't got the fat in them and there's a bit of flavour. Our old Glenila chickens didn't have fat, they were bred from a good stock. I think the fat comes from the breeding and they put tallow in the feed which is high cholesterol. I think you can control the fat with what you feed them. I'm sure you could. Now they're becoming stringier too.*

28 _____ December 1985; "Antibiotics and you", p.20 (see note 27)

29 The Sunday Tasmanian, 13/1/91; p.7

30 Mercury, 22/1/73; p.1

Our birds were beautiful. At Glenila we had natural ventilation in our sheds and nowadays they stock two birds to our everyone. But don't get me into any confrontation with Inghams over the quality of the birds. I have no axe to grind and you can't prove what you say. It's only an idea isn't it? [31]

4.5 Conclusion

Under the control of agribusiness, production methods have intensified and now require large amounts of capital. For those farmers who own their $200 000 sheds "growing" provides an income, but for those who have debts there is a constant struggle to remain financial. The remaining farmers have increasingly to confront the health and environmental questions being raised in society about the benefits of "modern", "efficient", poultry production. These questions range from the health of farmers and the animals themselves, to the health of consumers, the environment and local economies. As more farmers retire, will there be people to fill their shoes or will "growing" become a purely company affair? Some people argue that all poultry should be free range as was the practice 40 years ago on most of the Peninsula, when chickens were a part of the mixed farm.

The changes in poultry farming on the Peninsula have mirrored those in the rest of the country. Agribusiness has benefitted greatly from the growth in the industry both in terms of the scale of the industry and in terms of large profits. Poultry are definitely big business. The big companies have also tightened their grip on the industry as a whole and this can be seen in their control of virtually every stage of production from breeding, to hatcheries, feed mills, processing, transport and marketing. Farmers have become "growers" and even that role is under some threat as the trend to company farms increases. The local community has lost control of a local enterprise which benefitted it in terms of livelihood, income generation and jobs. It has

[31] Personal Communication with K. McDonald, 30/1/91.

also lost a way of doing business which was more family like, more co-operative and less competitive. In short, the community has lost much of its political and economic independence.

Chapter Five
Historical Background

> *As we watch the sun go down evening after evening through the smog across the poisoned waters of our polluted earth, we must ask ourselves seriously whether we really wish some future universal historian on another planet to say "with all their genius and skill, they ran out of foresight, and air, food and water, and ideas.*[1]
> (U- Thant, Secretary General, United Nations, 1970)

5.1 Introduction

This chapter sets the developments in agriculture in the last 20 years in the context of the history of human occupation of the Peninsula. The present economy is a very recent development, in the long period humans have been living on the Peninsula. As Coombs has argued, the contemporary economic system is an "historical artefact" that has developed since the days of the hunter-gatherers.[2] This chapter looks at the development of five distinct phases of the Peninsula's economy. These are the Aboriginal economy, the convict period, free settlement, mixed farming and the modern economy. It shows that a variety of economies have existed before the present one, which have involved a diversity of skills, and technologies, alternative ways of structuring an economy and ways of living.

Despite enormous increases in the range, content and organisational complexity of the present economic system, the purported basic social purpose of economic activity remains the same. In broad terms it is to provide the members of the social group with access to a livelihood; to the material, social, intellectual and spiritual means to a healthy,

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1 Hanley, W., & Cooper, M., 1972, Man and the Australian Environment; Current issues and viewpoints, McGraw-Hill, Sydney, p.xxii.

2 Coombs, H.C., 1990; The Return of Scarcity; Strategies for an Economic Future; Cambridge University Press, Melbourne, p.2

secure and stimulating life. How well an economy allows people to fulfill these needs is a measurement of its effectiveness.[3]

While it is not possible to return to the past, it is possible to learn from it. Study of these past economies allows consideration of the current economy in greater historical perspective and provides a storehouse of ideas for the present community.

5.2 Aboriginal occupation

> *Tasmania is further south than any other place in the southern hemisphere inhabited during the ice age. Not only were there glaciers on its mountains, but icebergs would also have come floating past the coast from the great Antartic ice sheet only a thousand kilometres to the south. Into this freezing toe on the foot of the world moved the Aborigines, perhaps impelled into empty space by an urge to explore. But these Aboriginal hunters stayed and weathered out the glacial cold in caves.*[4]

About 24 000 years ago, a land bridge was opened between the continent and Tasmania which remained open for the next 12 000 years.[5]. In the 1970s and 1980s a number of ice age caves were found in Tasmania which provided some clues as to the life of those early ice-age Tasmanians. The caves contained old charcoal, artefacts and the remains of animals between 20 000 and 23 000 years old.[6]
The Tasmanian Aborigines were cut off from the mainland about 12 000 years ago. As the climate grew warmer they were able to leave their caves and develop new ways of life to adapt to their new environment. Aborigines hunted game including the brush wallaby, the barred bandicoot, the tiger cat, the native cat, pademelon and the wombat. They used- bone awls or skewers to sew together possum skins into

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[3] Coombs, H.C., 1990; p1 (see note 2)

[4] Flood,J., 1983; Archaeology of the Dreamtime, Collins, Sydney, p.110

[5] Flood,J., 1983; p.248 (see note 4)

[6] Flood,J., 1983; p.103 (see note 4)

cloaks or rugs or to make nets and baskets. Stone tools were used overwhelmingly for chopping, hammering and cutting purposes and for manufacturing wooden tools, especially spears. Aborigines discovered natural glass over 14 000 years ago. They selected the glass, collected it in bags, and carried it back to their caves for manufacture into sharp cutting tools.

Comparatively little is known of the Aboriginal occupation of the Peninsula and current knowledge is mainly dependent on archaeology. According to Gaughwin there is evidence that there was long and continuous use of the coastlines of the Peninsula for at least 5 000 years with perhaps more sites being used in the last 3 000 years.[7] The Peninsula was part of the territory of the Oyster Bay Tribe, which also included most of the East Coast of Tasmania.[8] The Oyster Bay tribe is believed to have consisted of ten bands. One band, the *Pyairrerme,* comprising approximately 50 people, was situated at Eaglehawk Neck.[9] From shell middens found on several coastal sites it is known that the Aboriginal people used much of the coastline for shell fishing, including mussels and oysters. Midden sites have been found in coastal areas around Nubeena, Roaring Beach, Low Point and Sloping Island. Archaeological evidence, from Gaughwin, also shows that the Aborigines lived in hunting camps in several of the limestone caves and rock shelters in the wooded and grassed hills of the inland areas of the Peninsula. The caves were often at the base of sandstone ridges near the fresh water sources of the valley floors. One large west-facing cave has been found near a valley floor, close to a freshwater lagoon with three red ochre hand stencils grouped together on the sloping rear wall.[10]

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7 Gaughwin, D., 1989; *Aboriginal Land Use on Tasman Peninsula,*in Smith, S.J. (Ed), 1989; Tasman Peninsula- Is History Enough?: Past, Present and Future use of the Resources of Tasman Peninsula. Royal Society of Tasmania. Hobart, p.94

8 Ryan, L., 1981; The Aboriginal Tasmanians, Queensland University Press, Brisbane, p.17

9 Gaughwin, D., 1989; p.91 (see note 7)

10 Gaughwin, D., 1989; p.94 (see note 7)

During the winter the *Pyairrerme* lived on the Peninsula collecting shellfish and marine vegetables. Flood has noted that winter was a time of stress for the Aboriginal communities and the big tribes broke up into bands and spread out along the coastlines in the search for food. Men and women hunted seals, while women dived for shellfish. The women, in particular, were excellent swimmers and could stay under water for a long time. They dived down, pried the shells off the rocks with small wooden wedges, and put them into rush baskets suspended form their necks. Crayfish were also obtained by diving.[11]

At the end of July, when swans and ducks arrived in lagoons and riverine areas to lay their eggs and bring up their young, the band would begin to move inland up the Little Swanport and Prosser Rivers to the Eastern Marshes, where there were birds, kangaroos and wallabies. As summer drew near, they moved further west, hunting and firing the bush for game and then moved on to the high country in the Clyde and Ouse River valleys in Big River country. The attractions of the Big River country were eucalyptus *gunii*, a gum from which an intoxicating drink could be made and the extensive hunting grounds around the Great Lake and along the Clyde and Ouse River valleys.[12]

Summer was a time of abundance when food was plentiful and varied. This summer abundance of food meant that the food quest occupied no more than one or two hours a day allowing leisure for a rich cultural life, for the gathering of the tribe, for corroboree, and for exchange of information and artefacts. The diet of those groups whose economy has been recorded in detail emerges as more balanced, varied and nutritious than that of many modern consumers.[13] The quality of life and the amount of leisure available in traditional Aboriginal communities was remarkably high.

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11 Flood,J., 1983; p.171 (see note 4)

12 Ryan, L., 1981; p.20 (see note 8)

13 Flood,J., 1983; p.233 (see note 4)

Some of the simplicity, dignity and self sufficiency of these people was captured by Captain Cook when he described his meetings with Australian aborigines in 1770,

> *From what I have said of the natives of New-Holland they may appear to some to be the most wretched people upon Earth, but in reality they are far more happier than we Europeans. They live in a Tranquillity which is not disturb'd by the Inequality of Condition: The Earth and sea of their own accord furnishes them with all things necessary for life, they covet not Magnificent Houses, Household-stuff &c, they live in a warm and fine Climate and enjoy a very wholesome Air, so that they have very little need of Clothing and this they seem to be fully sensible of, for many to whom we gave Cloth &c to, left it carelessly upon the Sea beach and in the woods as a thing they had no manner of use for. In short they seem'd to set no Value upon any thing we gave them, nor would they ever part with any thing of their own for any one article we could offer them; this in my opinion argues that they think themselves provided with all the necessarys of Life and that they had no superfluities.*[14]

This centuries old tranquility was not to last long. Huge European pastoral expansion within Tasmania in the 1820s, ensured the virtual destruction of the Big River, Oyster Bay, Ben Lomond, North Midlands, and North Tribes. The Oyster Bay Tribe was one of the first to feel the full effects of pastoralism. It is known that from 1800 to 1835 for example, at least 27 Oyster Bay people were captured and 67 were shot.[15] The summer hunting grounds were also the preferred grazing land for the flocks of sheep of the settlers. These settlers of the 1820s have been described as the "new gentry".[16] They were retired army and naval officers from the Napoleonic wars, sons of the English, Irish

[14] Flood,J., 1983; p.234 (see note 4)

[15] Ryan, L., 1981; p.263 (see note 8)

[16] Ryan, L., 1981; p.16 (see note 8)

and Scottish landed gentry, as well as the sons of colonial officials, all of whom had capital to invest in the pastoral industry. As evidence of their wealth and status, they brought letters of recommendation from the Colonial Office in London, suggesting that they receive land grants of about 400 hectares each and that they be assigned at least one convict servant. In 1823, 175 704 hectares were granted to the new settlers, the largest alienation of land in a single year in Tasmanian history. By 1830, nearly half a million hectares had been granted and there were already more than a million sheep in Tasmania.[17]

The sudden appropriation of so much of their land and the vast number of sheep in their hunting grounds destroyed the Aboriginal economy. They resisted the occupation of their land and took to guerilla warfare in the early 1820s in the settled districts, spearing stock keepers and their stock and burning their huts. The colonial administration, stationed detachments of military and police while stock keepers and settlers formed vigilante groups. In 1828, Martial Law was declared, giving the military the right to apprehend without warrant or to shoot on sight any aboriginal person found in the settled districts. It was similar in effect, to a declaration of war.[18]

The military operation known as the "Black Line", began in November 1830. It involved over 2 000 heavily armed soldiers, free settlers and convicts forming a line across the settled districts in the north and slowly moving down the breadth of the settled districts, with the intention of driving all Aborigines on to the Peninsula, which was to be used as an Aboriginal reserve. Although very few Aborigines were captured, the line did succeed in clearing the settled districts. When the remaining Big River and Oyster Bay people were captured, in January 1832, Martial Law was revoked and the settlers had sole possession of the settled districts. Martial Law had remained in force for over three years.

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[17] Ryan, L., 1981; p.83 (see note 8)

[18] Ryan, L., 1981; p.99 (see note 8)

Those who survived were rounded up by George Robinson, appointed as the official protector/capturer of the Aborigines and removed to segregated reserves on islands such as Flinders Island in the Bass Strait. Governor Arthur wrote to his superiors in London:

> *If the Tasmanian experience were to be repeated in the rest of Australia the prospect is daunting. A few years of conflict have left 1 000 dead (800 blacks, 200 whites) and caused enormous property loss, insecurity and collapse of investor confidence. Once the Aborigines had been pacified, property almost suddenly rose in value from 50-100% at least.*[19]

Before European invasion and occupation, the aboriginal inhabitants possessed a thriving culture and economy which had survived a number of ice ages. They knew the country well and it satisfied all their needs for shelter, freshwater, firewood, stone and other raw materials for tool making. They adjusted to the sealing communities but the pastoral invasion of the 1820s destroyed their economy. The descendants of Tasmanian Aborigines have since survived the onslaught of European culture and economy but live in Australian society today as second class citizens. Only in 1967 were they granted citizenship and many of their legitimate demands for land rights, recognised as legitimate by international courts of law, still go unheeded today. Their ancient ochre hand stencils remind us just how long they were in occupation of this land and how long their hunter/gatherer economy provided stability.

5.4 Prison Colony, (1830-1877)

> *....the rows of men in heavy chains was to me a heart-sickening and dreadful sight; that man should become so brutalised that he must be treated like a wild beast: but I cannot place it all to their own account, I believe this*

[19] Reynolds, H., 1983; The Law of the Land, Penguin Books (Australia) Ltd., Melbourne, p.83

brutality is to a great extent the offspring of an evil system.[20]

(Frederick Mackie, 1853)

The Peninsula did not become a prison for the Aborigines but it did become a prison for British convicts. The convicts were a product of the transportation system in Great Britain in the 1700s. The system was designed to rid Great Britain of surplus population and in particular of those landless people congregating in the overcrowded slums of the new manufacturing cities. Ironically this surplus population was partially caused by the forcible clearing of a large proportion of the British population from the land in the fifteenth to the eighteenth centuries. During this time the agricultural districts of Great Britain were witness to the often violent and bloody removal of peasants from their land. Land that had previously been held in common ownership for centuries was suddenly enclosed, to become private property. Writing of the changes one commentator described *"...the decay of a people, of towns, churches and tithes"* of *"...arable land turned into pasturage"* and the *"...ruins of former dwelling - houses, barns, stables etc being the sole traces of the former inhabitants."*[21] Great Britain became the land of Thomas Moore's book, Utopia, a land where the sheep had swallowed down the men.[22]

Dispossessed of their land and means of subsistence, extended families were split up and forced into factories or domestic service, down mines or onto the roads. People lost the mutual aid of village communities, land and old crafts. To add to the popular misery, between the years 1760 and 1810, 63 additional crimes were made capital offences including petty theft and forms of industrial rebellion, like destroying a silk loom, throwing down a fence and firing a corn rick.[23] Great

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[20] Brand, I., 1978; Penal Peninsula: Port Arthur and its Outstations, 1827 - 1898, Jason Publications, Hobart, p.110

[21] Marx, K., 1984; Capital: A Critique of Political Economy, Volume 3, Progress Publishers, Moscow, p.879

[22] Marx, K., 1984; p.880 (see note 21)

Britain's prisons were overcrowded and it increasingly turned to its colonies to provide new prisons. Port Arthur and the Peninsula were to become such a prison.

The reasons for choosing Port Arthur as the site for a prison were both political and economic. The Peninsula was initially considered unsuitable for agriculture. In 1831 the Peninsula was described as presenting *"an unvaried prospect of thickly timbered hills* and the soil was considered to be *"so stony that it would never pay the trouble and expense of clearing for the purpose of cultivation".*[24] The Peninsula did not have the open grasslands of the Midlands and so was of little or no use to the pastoral industry. However, the geography of the Peninsula made it a natural prison with 74 square kilometres of rugged, heavily timbered country which was virtually water locked except for the narrow easily guarded neck to Forestier Peninsula. It was a day's sail from Hobart Town, within easy reach but sufficiently isolated by land, to meet the requirements of the British authorities.[25] Governor Arthur described the Peninsula as a *"...penitentiary formed by nature".*[26]

A settlement was established in 1830 when the first 18 convicts were sent to Port Arthur. They included timber fellers, sawyers, shingle splitters and one shoemaker.[27]
The first export use made of the Peninsula's resources was to supply the settlement in Hobart with regular shipments of timber, coal and later bricks. Brand quotes "an author" who described the work the convicts performed carrying large logs from the interior and almost impassable parts of the woods, to the beach, landing and transporting

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[23] Marx, K., 1984; p.883 (see note 21)

[24] McIntyre, G.N., 1968; The Alienation and Settlement of Crown Land on Tasman Peninsula. Honours Thesis, University of Tasmania. Hobart, 1968; p.4

[25] McIntyre, G.N., 1968; p.2 (see note 24)

[26] Brand, I., 1978; p.11 (See note 20)

[27] Brand, I., 1978; p.3 (See note 20)

them through the water to the dry ground and dock-yard.[28]

> *Seen at a distance, they look like an enormous centipede which they are sometimes called while moving along, joined together as it were, by the log itself for a backbone to which, like so many legs, they were severally attached. Self preservation compels every one to do his best to support the immense weight, which, notwithstanding, he must be strongly impressed within himself would crush him at once to death, whatever his efforts might be, unless his companions in like manner did their part.* [29]

Compared with other activities, agriculture developed slowly. Convicts were initially allowed small plots to grow their own vegetables and apparently spent much of their spare time gardening, but these gardens were disallowed after only a year, when Governor Arthur objected to convicts being allowed "*..to garden as recreation*". Individual plots were replaced by government gardens where convicts were to "*...labour*".[30]

In 1834, it was reported that scurvy was prevalent amongst the convicts, as were dysentry and pulmonary disease. The supply of vegetables was very small and insufficient to counter the effects of salted meat which was the staple diet.[31] Typical rations consisted of flour, salted meat, tea and sugar. Vegetable production gradually increased and by 1839, there were 16 hectares under cultivation. The main crops were potatoes and cabbage, and in that year a surplus of potatoes was shipped to Hobart. It was thought that the settlement could provide Hobart with a surplus of 50 tons annually.[32]

Port Arthur was established from the sea, and all subsequent nearby

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28 Brand, I., 1978; p.31 (See note 20)

29 Brand, I., 1978; p.31 (See note 20)

30 McIntyre, G.N., 1968; , p.10 (see note 24)

31 Brand, I., 1978; p.22 (See note 20)

32 Brand, I., 1978; p.47 (See note 20)

expansion was also dependent upon shipping. It is not surprising therefore that shipbuiding became an important early industry. As a recent report on the Port Arthur historic site noted,

> *Shipbuilding was one of the earliest and most vigorous activities in the settlement and contributed a great deal to the early aspirations for self-sufficiency.*[33]

Construction of the dockyard was begun in 1833, and eventually included a boatslip, two docks, two saw pits, two blacksmith's shops, a boathouse, a boatshed, a shipwright's house and an overseer's hut. In the ten year period between 1834 and 1844, 150 boats were built including a number of 300 tons or more.[34]

The first telegraph station on Mt Arthur was completed in 1833. This allowed direct communication between Port Arthur and Hobart Town using the semaphore stations already located there. It was the first of a widespread network of stations which ultimately linked all the penal and military stations on Tasman and Forestier Peninsulas.[35]

In 1833 coal was discovered at Plunkett Point and with high demand for coal in Hobart, a mine was soon commenced.[36] The first steps were also taken towards turning Port Arthur into a manufacturing centre with the setting up of a tailor's shop and a shoemaking shop.[37] James Backhouse who visited Port Arthur in 1834, described some of the small industries which included: shoe-making, nail-making and carpentry.[38] At Point Puer, a separate boys prison, there was also a tailor's shop which made the sheep-skin clothing worn by the boys at the time.[39] In 1835, a water operated saw mill was under construction.

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33 National Parks and Wildlife Service, Tasmania, 1985; Port Arthur Historic Site, Management Plan, Hobart, p.56

34 McIntyre, G.N., 1968; p.14 (see note 24)

35 Brand, I., 1978; p.15 (See note 20)

36 Brand, I., 1978; p.17 (See note 20)

37 Brand, I., 1978; p.9 (See note 20)

38 Brand, I., 1978; p.23 (See note 20)

The first brick-kiln, fired by wood was erected in Opossum Bay, some time prior to 1836.[40] Developments at Port Arthur were reported in the Hobart Courier in 1836. They included "*..construction of a brig of almost 300 tons for use in the coal trade...the building of a railway between Norfolk and Long Bays*...and an *..artesian apparatus supplying water to the settlement*".[41]

The chaplain's report on the school at Point Puer in 1837 discussed the training of the boys which included training them in trades such as:

> *Boot and Shoe makers, Carpenters, Blacksmiths, Nailors, Tailors, Coopers, Bakers, Kitchen Gardeners, and Sawyers..a few are about to be put to Book binding and Turning in their different branches...*[42]

In 1836 convicts built a seven kilometre railway which connected the heads of Norfolk Bay and Long Bay. It was the first passenger railway in Australia.[43] T.J. Lempriere, an officer at Port Arthur, recorded the development of this railway in his book, Penal Settlements of Van Diemen's Land.

> *It occurred to Captain Booth that with a few additional means such as sawyers, nails, etc, a rail or tram road might be established. ...The idea was no sooner conceived than brought into effect.... and in the space of some months, completed a railroad four and half miles in length...The railroad has been found to answer every purpose for which it was required. A gang is stationed at the centre of it whose occupation consists in propelling backwards and forwards the wagons some of which are covered in for dry goods, others open or in the shape of*

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39 Brand,I., 1978; p.27 (See note 20)

40 Brand, I., 1978; p.8 (See note 20)

41 Brand, I., 1978, p.28 (See note 20)

42 Brand, I., 1978, p.35 (See note 20)

43 Heard Dora, 1981;"The Journal of Charles O'Hara Booth: Commandant of the Port Arthur Penal Settlement", Tasmanian Historical Research Association, Hobart, p.57

cradles for boats. Whaleboats and even large launches have been conveyed across in safety. In Norfolk Bay a schooner, the Swallow, of fifteen tons, built at the settlement, is stationed to convey stores to and fro.[44]

In January 1839, permission was granted to establish slaughtering yards at Port Arthur to provide fresh meats for the settlement. The hides were sent to Hobart.[45] Shipbuilding included a steamboat of 110 tons built for the run between Hobart Town and New Norfolk and a ship of 300 tons built to take sheep to Port Phillip (Melbourne).[46]

By 1839, there were nearly 1 000 men at Port Arthur employed in chain gangs, mining, shipbuilding, brickmaking, gardening, charcoal burning, tailoring, blacksmithing, shoemaking, carpentry, turning, wheelmaking, mason work, sawing and bricklaying. Of 1 111 men tried, 210 received a total of 8 576 lashes, an average of 41 strokes each.[47]

The Colonial Times, in August 1840, announced, "The Port Arthur settlement is likely to prove no bad speculation to the Government, for, with coals and ship-building, there are considerable farming operations in progress. The Isabella arrived in the harbour, last Friday morning, with the first load of about 3 000 bushels of wheat raised in that settlement and sent here for grinding. It is said that a great breadth of land is now under wheat at Tasman's Peninsula.[48]

In 1840, a steamship for a Captain Swanson was completed at the dockyards and two tug boats were ordered.[49] According to Brand, the

[44] Brand, I., 1978; p.31 (See note 20)

[45] Brand, I., 1978; p.45 (See note 20)

[46] Brand, I., 1978; p.37 (See note 20)

[47] Brand, I., 1978; p.53 (See note 20)

[48] Brand,I., 1978; p.55 (See note 20)

[49] Brand, I., 1978; p.53 (See note 20)

first hint of the trouble which would ultimately arise over the construction of steamships for private owners, came in September, when Maclean requested information on ships built there. The *Derwent* which had been built for Swanston's Derwent Steam Company, had been sold to a private individual for "*...about £ 7 000*". The information was being collected for the Lords Commissioners of Her Majesty's Treasury in London.[50] Lord Stanley wrote to Tasmania's Governor Franklin in 1842, saying that the transaction "*appears to be open to very grave objection*".[51] It was found that Captain Swanston had only been charged £350 for the convict labour used in the building of the boat when in fact the cost would have been closer to £2 500. (Convict labour thus received approximately 14% of its worth in this instance) After the ship had been fitted with engines, it was sold for £7 000.[52] Despite the controversy, shipbuilding boomed and the convicts and shipwrights continued to build ships. In 1846, a steamer of 120 tons was completed, a schooner of 200 tons was nearing completion and two colliers for the Hobart coal trade had been ordered.[53]

According to Glover, Port Arthur also played a role as an experimental horticultural station. In the 1840s, a visitor described the government gardens which were growing fruit and vegetables and "*...a beautiful avenue of trees...near the hop fields covering an extent of about 6 acres.*"[54] By December 1848, 103 tons of flax had been grown. In 1851, samples of wheat were exhibited in London. In the same year, Governor Denison announced his intention to send some deer to Salt Water River from the Domain in Hobart. By 1860 numbers had increased to such an extent that they were severely hampering the farming operations of a former Port Arthur constable, John Evenden, who had taken over the Salt Water River farm and was working it on

50 Brand, I., 1978; p.55 (See note 20)

51 Brand, I., 1978; p.55 (See note 20)

52 Brand, I., 1978; p.65 (See note 20)

53 Brand, I., 1978; p.83 (See note 20)

54 Brand, I., 1978; p.89 (See note 20)

orders were given that none were to be killed.[55]

In 1839 Commandant Booth identified 2 000 acres at Saltwater River suitable for growing wheat.[56] In the same year, Deputy Assistant Commissary Roberts, proposed that a water mill and granary be built at Port Arthur where wheat could be ground into flour. He envisaged a mill with a granary to hold 40-50 000 bushels of grain, capable of storing two years supply of wheat for the settlement. Commandant Booth suggested a site beside Settlement Creek (Port Arthur), which would provide sufficient water to power a 20 feet diameter, overshot water wheel driving two or three sets of four-and-a-half-feet diameter mill stones. By working ten hours daily, six days a week, two sets of stones would grind 50 000 bushels annually.[57]

In 1841, the probation system was introduced which meant that those convicts not sentenced for life, were employed in the service of the government and spent a number of years working in gangs. On the Peninsula, the probation gangs were used to establish new settlements. The Saltwater River Probation Station was the first of these outstations and proved to be a very successful farm. Similar farms using probation gangs were established at Impression Bay, (Premaydena), Cascade Bay (Koonya), Opossum Bay, Safety Cove and Wedge Bay. One commentator reported on the "*...valuable work*" being performed by the probation gangs in opening up the Peninsula.

> *There are now four flourishing stations thereon; roads are forming to connect them with each other, piers are constructing for the shipment of produce; and large openings are making in the forest; so that discontinue the system a couple of years hence, and even then Tasmania will have gained a vast accession of richly productive territory.*[58]

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55 Glover, M., 1979); "Some Port Arthur Experiments", Tasmanian Historical Research Association, Papers and Proceedings, 26 (4) 132-43, p.135

56 Brand, I., 1978; p.56 (See note 20)

57 Brand, I., 1978; p.46 (See note 20)

The building of the flour mill and granary was finally approved in 1843 and completed in 1845.[59] By that time 180 acres were under wheat at Saltwater River. [60] The Comptroller General reported in 1846, that the mill;

> *ground most of the flour used at the stations on the Peninsula, and the stones, three in number, being turned partly by water and partly by a tread wheel, which is worked by fifty-nine of the worst of the convicts.*[61]

The Reverend H. P. Fry, the minister of St. George's Church, Battery Point (Hobart), visited Port Arthur in 1848 and some years later published a book, in which he described the convict settlement and some of the convicts' work:

> *Thirty-nine men were employed digging and at agricultural labour,...159 at various mechanic trades...Seventeen men were at work in the blacksmith's shop...The furnace is capable of casting five tons weight of iron in one piece, and brass frames of one cwt. The peal of bells for the church were cast here. Six forges were in full operation...Iron work for all the the government buildings and probation stations is wrought here...Twenty-six carpenters were at work in a large shop, making various articles, and house work for the outstations...The cook- house and the bake- houses are large, and well supplied with ovens and boilers; eight convicts are employed as cooks, four as bakers. The bread and provisions appeared very good.*[62]

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58 McIntyre, G.N., 1968; p.11 (see note 24)

59 Brand, I., 1978; p.60 (See note 20)

60 Brand, I., 1978; p.75 (See note 20)

61 Brand, I., 1978; p.83 (See note 20)

62 Brand, I., 1978; p.91 (See note 20)

5.6 Decline and Fall

With the cessation of transportation in 1853, a decline in convict activities on the land was inevitable. The place of convicts in the prison population was increasingly taken by paupers, lunatics and invalids, many of whom could not do the heavy work of the convicts. As the supply of fit and able bodied convict labour declined, many of the settlements were abandoned.

> *Since 1853 there had been no "fresh" convicts and those remaining at Port Arthur were growing older less capable, mad, sick, too poor to leave, or a combination of all these things. The penal system had reduced its charges to the point where labour assets now became welfare responsibilities.* [63]

From this time onwards the convict settlement began a steady decline. The authorities sought to defray the costs of the operating expenses of the prison by supplying Hobart with timber, quarrying building stone and leather work. In 1853, the flour mill and granary were converted to the new penitentiary to accommodate convicts.[64]

In 1855 there was another controversy, again over the use of convict labour for personal gain. A Select Committee set up to look into charges of "...*fraud*" and "...*embezzlement*" against the officers at Port Arthur, found that there had been,

> *...abuses in the uses of convict labour, to build private houses ...including the supply of fancy timber and stone building materials.*[65]

According to Brand, "...*a number of officers received severe*

63 National Parks and Wildlife Service, Tasmania, 1985; p.9 (see note 34)

64 Brand, I., 1978; p.139 (See note 20)

65 Brand, I., 1978; p.131 (See note 20)

reprehension for unauthorisedly using prison labour for their own private benefit in the erection of private houses".[66]

In 1855, two small steam engines were built to operate lathes.[67] In 1856, the timber felling and sawing activities were greatly increased, with new timber tramroads being constructed.[68] 70 acres were under cultivation at Safety Cove near Port Arthur. In 1858, a slaughter house was built at Safety Cove and live cattle were shipped there for killing.[69] A new flour mill powered by a steam engine originally used to power the saw mill, was expected to be ready in October 1858, and would again enable the authorities to have supplies of genuine flour; *"...an object of much importance".* [70]

By mid 1859, the forests around Safety Cove were being used to supply the settlement with timber. To bring that timber to the water's edge, a tramroad was constructed from the Safety Cove farm to a small bay at Point Puer where a jetty was built. The slaughter-house was moved to Safety Cove in April 1859.[71] There were also proposals and experiments into converting the source of energy for lighting the prison, from oil to gas, as a means of efficiency and economy.[72]

In 1860, a Joint Committee of Parliament was appointed to enquire into the desirability of opening up the Peninsula to free settlement. It found that the annual cost of the convict settlements on the Peninsula, was £30 000 and £1 300 annually for the steamship which supplied Port Arthur. The report also found that the prisoners were *"...chiefly employed upon unprofitable work and repaid only a fraction of the cost of their maintenance."* The Committee recommended the

66 Brand, I., 1978; p.133 (See note 20)

67 Brand, I., 1978; p.132 (See note 20)

68 Brand, I., 1978; p.135 (See note 20)

69 Brand, I., 1978; p.142 (See note 20)

70 Brand, I., 1978; p.142 (See note 20)

71 Brand, I., 1978; p.146 (See note 20)

72 Brand, I., 1978; p.136 (See note 20)

"...closure of Port Arthur as a prison and the opening..."

of the Peninsula to free settlement which "*...would benefit the trade and the resources of the colony*". It also sought reimbursement from the Imperial government in London for the costs of keeping imperial convicts.[73]

Another Joint Committee of Tasmania's Parliament was established in June 1863, to investigate employment of prison labour. The committee found that some reduction in the expenses of running the settlement had resulted in the previous year from employing 50-60 men in clearing and cultivation.

> *A considerable portion of the vegetables required for the daily rations, as well as of the eggs and poultry used in the Hospital and Invalid Departments of Port Arthur, are now obtainable from the judicious employment of Prisoners in agricultural and farm operations; and in the same way, there is reason to believe that pork might be grown on the spot, in limited quantities, for the service of the Convict Establishment.*[74]

For most of the history of the penal settlement it had been official policy to have the prisoners do all the heavy carrying and hauling themselves. [75] In 1864, this policy was revised and draught animals appeared at Port Arthur, when 20 bullocks were purchased for the carting of timber. In 1865 a circular saw mill was built at Port Arthur.

In 1867 a tannery was established at Port Arthur to enable the large stock of kangaroo and other hides to be converted into leather for the manufacture of boots for the prisoners and to save the cost of purchasing leather.[76] In 1868 there were further anonymous charges of corruption and the use of convict labour for private gain. This time the charges were raised in a booklet printed in Hobart entitled,

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73 Brand, I., 1978; p.151 (See note 20)

74 Brand, I., 1978; p.157 (See note 20)

75 Brand, I., 1978; p.159 (See note 20)

76 Brand, I., 1978; p.176 (See note 20)

Revelations of Port Arthur. The booklet described the officers of Port Arthur as *"cow keepers"* who made a profitable renumeration *"...from their cattle in one way or another"*.[77] The supply of timber to Hobart continued to be a major activity, until the penal settlement was closed in 1877, while agriculture was carried out largely for subsistence.

A reporter for the Hobart The Mercury travelled to the Peninsula in 1870, and described the farm near Port Arthur. The farming establishment, he wrote, consisted of cow - sheds with room for 40 cows, with a store for root crops, separate stalls for the feeding of cattle, and room for calves and chickens. The piggery consisted of 16 sties with large boilers for preparing food for the pigs, and the dairy used a fountain of water to keep everything cool. There was also an apparatus for separating the cream and making butter. There was a manure depot, where night soil and ashes were brought to be mixed with burnt earth and lime and made into fertilizer.

In 1870, after considerable negotiation, the penal settlement passed from Imperial control to colonial control with the Imperial government paying the colony, 6 000 pounds per annum for 12 years, for the maintainence of the paupers, lunatics, prisoners and hospital patients.[78] Commandant Boyd was in favour of breaking up the settlement and moving to Hobart:

> *To continue the establishment much longer would be very expensive; for as the men die off or otherwise diminish the staff of the establishment could not be reduced in proportion to the numbers, and thus the cost per head becomes rapidly excessive.*[79]

The move to Hobart was delayed for a number of years and the

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77 Brand, I., 1978; p.161 (See note 20)

78 Brand, I., 1978; p.190 (See note 20)

79 Brand, I., 1978; p.195 (See note 20)

prison's administrators continued to cut costs, to promote self sufficiency and to use convict labour in the most profitable way. As the outstations were abandoned Port Arthur and Safety Cove became the centre of activities. In 1872, the settlement began manufacturing soap for its own use using refuse fat.[80] By 1872, the only gardens on the Peninsula were at Port Arthur and Safety Cove. All the others had been abandoned to become pasture.[81] In 1873, wool, beef and leather were the most valuable products sent to Hobart.[82]

Over the next few years the settlement was gradually wound down. Walls were pulled down and 80 000 to 100 000 bricks were cleaned and sent to Hobart. Steam engines and railroads were dismantled and taken to Hobart. Bells, furniture and fittings and library books (the prison library had 13 253 books) were also taken to Hobart.[83] A number of boats including the schooner *Harriet*, together with cattle, horses, sheep, pigs and two sheep dogs were disposed of by auction.[84] In short, during the remaining years until this convict enterprise finally folded in 1877, there was a 'fire' sale of Port Arthur's assets in which anything of value was taken to Hobart. The remaining assets including the land and buildings were divided into lots and auctioned to the highest bidder. Following this 'fire' sale, real fires raged through Port Arthur, in 1895 and 1896 leaving much of the old settlement in smoking ruins.[85] Some thought it was a judgment. It certainly marked the end of an era.

In the convict prison, technology was not only used according to the demands of the economy but also for political reasons such as discipline and punishment. Hence the deliberate use of convicts as

80 Brand, I., 1978; p.196 (See note 20)

81 McIntyre, G.N., 1968; p.18 (see note 24))

82 McIntyre, G.N., 1968; p.18 (see note 24)

83 Brand, I., 1978; p.190 (See note 20)

84 Brand, I., 1978; p.200 (See note 20)

85 Brand, I., 1978; p216 (see note 20)

beasts of burden, on the water treadmill crushing grain, in the fields instead of bullocks, on the railways pushing the trolleys or in the forests hauling timber in their centipedes.

The economy of the convict period was dominated by the labour of convicts. They proved to be a highly skilled workforce, judging from the quality of their produce, including the historic buildings which they built both on the Peninsula and in Hobart. More importantly to private entrepreneurs, including it would seem some of the prison officers, their cheap labour provided the basis of comfort for officers and their families, success for some convict administrators and profit for some private entrepreneurs.

The convict economy achieved a seemingly high degree of self sufficiency within 10 years and it also established the Peninsula's first export trade in the commodities of coal, building materials of sawn timber and cut stone, boats, ships and some agricultural produce. Despite the flow of goods for 50 years from the Peninsula to Hobart and even to London, there was a continual reluctance on the part of imperial and colonial governments to invest capital in the Peninsula.

5.7 Free Settlement.

The fine quality of the timber, including the "first class quality of the Blue Gum, Stringy Bark, and Swamp Gum", was one of the earliest attractions for settlers taking up land on the Peninsula.[86] Timber getting was the first non - convict industry to produce exportable products from the Peninsula. McFie notes that timber from the Cascades area supplied piles for wharves at Dover in Great Britain and for South Africa before the turn of the twentieth century. [87] There was

[86] McFie, P., 1989; "Changes and continuations: the post-penal settlement of Tasman Peninsula" in Smith, S.J. (Ed), 1989; Tasman Peninsula- Is History Enough?: Past, Present and Future use of the Resources of Tasman Peninsula. Royal Society of Tasmania, Hobart, p.98

[87] McFie, P., in Smith, S.J., 1989; p.101 (see note 86)

also a demand for sawn timber in Hobart. The Taranna Wood Company was contracted to cut firewood for Hobart in 1885. Itinerant bushworkers - timber splitters and log haulers, made up a substantial part of the early population on the Peninsula.[88] By providing employment at a fixed location timber mills were the initial cause of village settlement on the Peninsula.[89] In 1912 there were seven local timber mills. Removal of the forest cover by timber workers often revealed land suitable for agriculture and so the cutting of timber proceeded hand in hand with developing agriculture.[90]

Another of the attractions for early settlers to the Peninsula was the availability of cheap land. The Tasmanian Government encouraged settlement by the introduction of land legislation which made cheap land available. The Crown Waste Lands Act was applied to the Peninsula in 1880 providing easy terms and deferred payments for people settling on what was considered to be "marginal" agricultural land. Some of the revenue from the sale of land was spent by the government on road building. Between 1881 and 1891 approximately 4 400 hectares were surveyed and settled.

In 1893 amendments to land legislation allowed land to be settled without people having to make any payment for the first three years. A further amendment in 1894, extended the period preceding payment, to five years.[91] In 1903 further amendments to land legislation made large areas of 'third class' land available.[92]

In the early years of free settlement on the Peninsula, the settlers pursued the same agricultural activities as the convicts. They grew subsistence crops such as potatoes, peas, oats and wheat and also grazed

88 McFie, P., in Smith, S.J., 1989; p.105 (see note 86)

89 McIntyre, G., and Munro, D., 1990; Tasmanian Historical Research Association, Vol. 37. No 1. Hobart, p.9

90 McIntyre, G.N., 1968; p.40 (see note 24)

91 McIntyre,G.,N., 1968; p.37 (see note 24)

92 McIntyre, G.N., 1968; p.45 (see note 24)

sheep and cattle. A majority of settlers took up land on the northern side of the Peninsula where much of the best agricultural land was available. Settlers tended to have large families and between 1879 and 1890, there was a baby boom with 165 children born in the growing settlements of Impression Bay, Carnarvon (Port Arthur), Cascades, Norfolk Bay, Wedge Bay, Long Bay, and Safety Cove.

In 1884, a visiting journalist commenting on the number of children said,

> *...it goes without saying that whenever there is a roof, there are children. Only five stared at me outside a house at Prices Bay.*[93]

Many of these settlers were non-conformist in their religious beliefs and were adherents to the fundamentalist principles of the Church of Christ. Other religious affiliations included the more liberal minded Congregationalists, which unlike the Church of Christ did not frown on drinking and dancing. McFie comments that the effect of this early pioneering Christianity was

> *...to create a more egalitarian community, without the great distinction between large landholders and workers. A sense of mutual support existed, made easier by the small farm sizes, and without the paternalism of Tasmania's older woolgrowing region.*[94]

In 1911, the population of the Peninsula had reached 1 171.[95] Agriculture had changed from a pioneering semi-subsistence to market oriented production, based on orcharding and the export of fruit to Britain. The tending of dairy cattle and sheep were important subsidiary activities [96]

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93 McFie, P., in Smith, S.J., 1989; p.100 (see note 86)

94 McFie, P., in Smith, S. J., 1989; p.101 (see note 86)

95 McIntyre, G., and Munro, D., 1990; p.15, (see note 89)

96 McIntyre, G. N., 1968; p.71 (see note 24)

The State-wide boom in orcharding and available shipping to export facilities in Hobart combined to make fruit growing the most profitable agricultural pursuit possible on the Peninsula and orchards began to replace other crops in location and the timber industry in importance.[97]

The value of Port Arthur and the Peninsula as tourist attractions had also been established. In 1913, there were two steamships visiting Port Arthur, three bus trips and ten to fifteen cars per week.[98] By 1920, the process of land alienation and settlement on the Peninsula was completed.

5.8 Mixed Farming

Despite the Great Depression and the Second World War, between 1920 and 1970, agriculture on the Peninsula experienced years of growth in which the basic pattern of agriculture changed very little. During this period agriculture was characterised by many small mixed farms. Farming families were usually self sufficient. They grew their own vegetables, kept dairy cows, chickens and pigs and perhaps grew some fodder crops for the animals and kept a small orchard. Supplementary sources of income were found in timber cutting, saw milling and work in the orchards, especially pruning and picking during the harvest season. Wooden cases for the fruit were made locally and this further contributed to employment. In the late 1950s and the 1960s there were approximately 40 dairy farms and 40 orchardists. It is estimated that in the 1950s, the orcharding industry provided up to 400 jobs.

Until the 1950s, the main form of transport for agricultural products had been by boat.[99] There were jetties at Nubeena, Saltwater River, Premaydena, Koonya, Taranna, Eaglehawk Neck, Murdunna and

97 McIntyre, G., and Munro, D., 1990; p.14 (see note 89)

98 McIntyre, G., and Munro, D., 1990; p.15 (see note 89)

99 McIntyre, G.N., 1968; p.43 (see note 24)

Dunalley.[100] One of the better known boats was the "*Cartela*" built by Henry Jones and Co (IXL). The "*Cartela*" did a trip on Thursdays for the sales at the Koonya market. A long time resident described these markets,

> *People would come from all over the Peninsula. They would bring all their produce and a lot of the local pedlars would come from Hobart and set up shop with their wares. The buyers from Hobart would go down and buy the produce and livestock, load it all on the boat and take it back to Hobart.*[101]

In 1950, a meeting of the Tasman Peninsula Primary Producers decided to ask the Transport Board to allow both the boat and the lorries to operate.[102] At another meeting in the same year, it was decided to write a letter to the Minister for Transport "*...asking that something be done in the way of a subsidy to keep the boat on the Tasman Peninsula*".[103] But transport by boat was phased out in the 1950s and lorries took-over. The phasing out of water transport has proven to be a great loss to the local community, reducing the choice of transport options and an alternative that had proven to be cheap and effective.

There were agricultural markets at Nubeena and Koonya every few weeks. According to one farmer, the market at Nubeena began in 1918 and the Koonya market sometime before that. The saleyards at Nubeena were run on a co operative basis. Debentures were issued to local farmers, keeping the costs of the saleyards as cheap as possible. These markets eventually closed in the 1950s and 1960s and the nearest market became Sorell and later Hobart. As one farmer said,

> *We used to have our own breeding pigs. In those days there was still the market on the Peninsula every*

100 Personal Communication, J. Price., 11/1/91

101 Personal Communication T.Roche., 7/1/1991

102 Primary Producers Union, Nubeena Branch, "Minutes of meetings, (1937-59)".

103 Primary Producers Union, Nubeena Branch, "Minutes of meetings, (1937-59)".

fortnight. It was in Nubeena. There was also one in Koonya, but we went mainly to the one in Nubeena. We also sold to the local butchers at Nubeena and Koonya. Then of course the stock lorry used to come once a month to the Sorell sale. That started around 1958. Then in the middle of the 1960s, the Nubeena markets were closed down. I suppose the farmers as usual couldn't see the forest for the trees. They were getting slightly higher prices in Sorell. So they supported Sorell and not Nubeena. So the Nubeena market died. And then everything went to Sorell. Of course Sorell died in the finish too, in the late 1970s. Bridgewater (near Hobart) in the end was the only outlet for our livestock.[104]

The mixed farming community which developed from 1920 to 1970 provided many small farmers and rural communities with a sustainable way of life. There was a high degree of self-sufficiency and mutual support. Co-operatives provided some protection from the effects of monopoly particularly in the orcharding industry. Primary production, processing and markets provided employment and the basis for a viable economy.

5.9 1970 to 1990, Heritage Conservation and Tourism

Tasman Peninsula is richly endowed with historical and heritage values which, in combination with a generous dotting of interesting natural features, makes the area unique and irreplaceable. As a tourist product, Tasman Peninsula is therefore one of a kind, even by world standards.[105]

Port Arthur is the principal tourist destination in Tasmania. Figures from the 1988 Tasmanian Visitor Survey indicated that 140 000 visitors to Tasmania visited Port Arthur in that year. Some 35 500 stayed

104 Personal Communication, H.& E. Kerstan, 26/10/90

105 Uy, L., 1989; Tasman Peninsula: tourism and tourist potential (some difficult issues) in Smith, S.J., (Ed), 1989; Tasman Peninsula- Is History Enough?: Past, Present and Future use of the Resources of Tasman Peninsula. Royal Society of Tasmania. Hobart, p.136

overnight in the area, for an average stay of 1.2 nights, and a further 103 800 visited the area on a day trip, most probably from Hobart.[106] About 400 beds are provided by way of hotel/motel/holiday cabin style accommodation on the Peninsula.[107]

Based on these figures, it is estimated that in 1990 tourists spent approximately $9 million in the municipality. It is also estimated that tourism directly provides employment for some 150 persons resident in the municipality, half full- time and half part-time, or approximately 27% of total employment. Some 34 businesses have been identified as deriving part of their revenue from tourist income while approximately 25 were totally dependent on tourists. Of this $9 million, approximately $2.9 million per annum was retained within the municipality as income of one form or another. This represents a third of total estimated visitor expenditure in the district.[108]

> *The balance flows out of the municipality in the form of operating costs and overheads, e.g. goods and services imported (mainly from Hobart), transport costs, power and telephone, insurance, taxes,..*[109]

The tourism industry will continue to be an important industry on the Peninsula, but care will have to be taken in the future to ensure that the industry benefits the community to the maximum extent possible. Already the greater part of the income generated by the industry does not stay within the local economy.

In 1985, the National Parks and Wildlife Service, produced the Port Arthur Historic Site, Management Plan and described Port Arthur as

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106 National Parks and Wildlife Service, Tasmania, 1985; p.26 (see note 33)

107 National Parks and Wildlife Service, Tasmania, 1985; p.29 (see note 33)

108 Patterson, E., 1990; "The value of Tourism to Tasman Municipality", Department of Tourism, Sport and Recreation, Hobart. p.2

109 Patterson, E., 1990; p3 (see note 108)

the most significant specimen of penal archaeology in Australia.

> *Port Arthur is the pre-eminent national symbol of Australia's convict background, which in turn was the dominant feature of early European settlement. Port Arthur has the quality of the shrine about it...*[110]

Uy has argued that both national and state Governments had shown *"...a reluctance to shoulder responsibility for the restoration projects at Port Arthur"*. From 1955 to 1986, there was a continuous struggle for the future of Port Arthur. This marked a failure to see the role which investment in conservation could play in stimulating the local and Tasmanian economy.[111] She considered that government support had been intermittent, almost sporadic, and indicated the lack of a well-thought out plan for the overall programme. This situation has since improved. Between 1979 and 1986 the State and Commonwealth Governments jointly funded a special project worth $9 million for site conservation and the development of visitor facilities. Half of the land is owned by the Crown and half is freehold property.[112] On the Peninsula, the National Parks and Wildlife Service, with a staff of 23, administers two Historic Sites, eight State Reserves and one Nature Reserve.[113] The whole Peninsula is now listed as part of the Australian National Estate, as an acknowledged heritage area.

5.10 Conclusion

> *When I first came here fruit was god, but now we have a new one and it's called tourism.*[114]

This remark from a resident sums up some of the most important

110 National Parks & Wildlife Service, 1985; p.61 (see note 33)

111 Uy, L., 1989; in Smith, S.J., 1989; p.135 (see note 105)

112 Uy, L., 1989; in Smith, S.J., 1989;p.134 (see note 105)

113 National Parks and Wildlife Service, Tasmania, 1985; p.5 (see note 36)

114 Personal Communication, N. & K. Noye, 17/3/91

changes in the economy of the Peninsula in the last 20 years. While primary industries like agriculture and forestry have been in decline tourism and heritage conservation have been growing. The growth of these industries is partly due to rising material affluence and the growing value attached by people to the past, and to the natural environment. Both industries are based on the rich inheritance that has been left to the present community. The aborigines sustained an economy, conserved the resources and managed the land for thousands of years. The Peninsula was to have been their prison but instead it became a prison for the convicts, transported for the 'term of their natural lives'. Although it may have been against the convicts' wishes, it was their task to build the magnificent buildings whose ruins have today put the Peninsula on the tourist maps and in the guide books.

Looking at future prospects for the Tasman Peninsula, Hepper considers two possible scenario's for the future development of the Peninsula.

> *The first is "business as usual", which requires that the peninsula should accommodate all the consequences of on-going piecemeal policies of the public and private sectors. The end result will be a resource base without unique identity, continuing land use conflict and ultimately a major loss of resource values. We can expect more local problems with increased public expenditure to rectify them. The danger is that we will replace quality with mediocrity....*
> *The second scenario involves taking stock of the situation....This is a redirection in resource terms from "can we afford it?" in the short term to "can we afford in the long term to lose it?"...The second option involves longer-term systematic planning and management of the peninsula's inherent resources and its potential to realise more sustainable returns with reduced conflict.*[115]

[115] Hepper, J., 1989; in Smith, S. J., (Ed), 1989; Tasman Peninsula- Is History Enough?: Past, Present and Future use of the Resources of Tasman Peninsula. Royal Society of Tasmania. Hobart, p.151

The Peninsula is a unique environment and its community is well placed to make the most of these opportunities. But to do this, it has to conserve the natural environment, conserve the heritage left by previous generations and engage in long term local economic planning. Part of the Peninsula's heritage is the legacy of previous economies and livelihoods which provides a rich inventory of ideas, forms of organisation and technologies which can be drawn upon in the task of designing a sustainable local economy.

Chapter 6
Conclusion: The Peninsula, an End or a Beginning?

> *Farming in the future will be done by big companies. The family farm is dead. There is no protection for small people. Another big problem is freight. The boat was slow but it was cheaper. There is also the problem of monopoly.*[1]

6.1 Introduction

This thesis has identified the major cause of the recent decline in agriculture on the Peninsula as the tendency towards monopoly control of local agriculture. This explains in part the contradictory nature of its "agricultural decline". On the one hand the local economy is affected by the loss of farms, businesses, livelihoods and a way of life. Farmers are caught on an economic treadmill with little control over their own conditions of production. Technology is imposed from outside. Capital intensive production produces goods in large quantity which receive little local processing or manufacturing. Local processing provides few jobs and little value added income and successful local businesses quickly become the target for takeover. On the other hand agribusiness has gained increased profits, greater productive capacity and economic contol. High profits in turn have allowed corporate expansion and greater concentration of economic ownership. Such is the dynamic by which economic imbalance is created and maintained as is witnessed in the orcharding, dairy and poultry industries on the Peninsula.

Modern agriculture is also breeding new problems and imbalances. These are long term and apparently permanent. They include the effects of the increased dependence on fertilisers, chemicals, pesticides and antibiotics which help sustain high productivity levels; the

[1] Personal Communication with H. & E. Kerstan, 26/10/90.

growing problem with land degradation; the concern about the health of farmers and the welfare of animals under intensive farming conditions; concern by consumers about chemical residues in food and the nutritional value of highly processed foods; concern about the loss of genetic diversity and the loss of traditional farming practices and values associated with farming when it was less a business and more a way of life.

Both old and new settlers on the Peninsula have much to lose from the growing concentration of economic power and much to gain, by securing a more balanced economy and greater independence. All farmers on the Peninsula could potentially benefit by a local planning process, the identification of common problems and the consideration of collective options to allow breathing space from the cost-price squeeze and room to formulate positive longer term social and economic strategies.

6.2 Economic and Social Options and Alternatives

Looking at the current economic crisis in Australia, Coombs has argued that alternative economic strategies must be developed to check, and if possible reverse, some of the current economic trends. Central to any overall strategy is:

> *-to abandon the conviction that 'bigger is better'...*
>
> *-to establish sustainability as the primary objective for enterprises exploiting or using natural resources*
>
> *-to aim for a rate of economic development which can be financed from our domestic savings, and ..preferably permits a gradual reduction in foreign ownership and external indebtedness,public and private...*
>
> *-to devote intelligence and resources to developing our own science and technology and their application...*
>
> *-to promote attitudes and behaviour which value*

simplicity...,

-to increase the social and cultural components of our desired lifestyle and

-to make access to a healthy, stimulating and dignified lifestyle to all citizens the prime objective of economic policy.[2]

These general outlines provide a sketch for an alternative economy. At a local level an alternative economic strategy could seek a gradual recovery of economic control by farmers, the protection of existing businesses and a regeneration of local industry, particularly in the areas where the greatest value added production can occur. Ways should be explored to increase the local skill base; protect and enhance the environment and increase local social, economic and political independence.

In regard to alternative directions for agriculture one rural commentator has argued that,

...room must be made for control of essential patterns of production and consumption, resources and activities to be passed back to individuals and groups within local communities. This means creating, through institutional change, incentives for... agriculture and industry to be moulded within localities. Such agricultural systems should rely on modern...technology (while employing) different concepts of work and operate with community objectives in mind. Only in this way will the likelihood of decline in the productive capacity of rural communities be averted.[3]

Such a change would require greater economic co-operation between

2 Coombs, H.C., 1990; The Return of Scarcity; Strategies for an Economic Future; Cambridge University Press, Melbourne, p14

3 Lawrence, G., 1987; Capitalism and the Countryside; The Rural Crisis in Australia.; Pluto Press, Sydney and London, p.278

farmers and greater involvement by the local community in economic planning.

6.3 Local economic planning

Local planning could help plan regional growth initiatives, which take account of the particular history of agriculture on the Penisula, the quality of its environment and cultural resources, the skills of its population and the opportunities of today. Consideration should be initially given to the long term future of heritage conservation as a sound investment in the Tasman economy and the basis for a healthy local tourist industry.

In 1986, the Federal Government committed a small amount of funds to the Country Centres Project (CCP) to look into the preparation of local economic strategies. The project was based on 11 rural centres in Australia. The CCP sought to encourage local communities to develop local economic planning and policy tailored to the circumstances and potential of their specific regions and to look at ways of attaining long-term economic viability. To begin the process of local economic decision making it set up a broadly based local liaison committee to bring together local knowledge and skills to formulate economic plans based on selected regional intiatives.

To help with the development of economic planning, the CCP recommended the development of a local area information base. It recommended the establishment of appropriate regional business management, marketing and financial networks. It also recommended the establishment of local work-skills training schemes specifically designed for local industry in consultation with the Colleges of Advanced Education, Technical and Further Education Colleges, the Commonwealth Employment Service, private business, local government and employee groups.[4] It also identified one of the

[4] Department of Immigration, Local Government and Ethnic Affairs, Local Government

major constraints to local economic development as being difficulties in gaining access to capital finance.[5]

Some of the most important overall trends to take into account when looking at the future of the Peninsula's economy are: growing tourism; the growing nostalgia for the past; the growing demand for conservation of Australian history and heritage and the growing market for fresh, organic and chemical free food.

A recent report by the TDA has identified the strengths of Tasmanian agriculture as a whole. These are: cool temperate climate, good quality water, highly fertile soils, four distinct seasons and isolation, clean atmosphere without industrial pollution.[6] The TDA report also pointed to the steadily growing pollution problems and traumatic aberrations like the Chernobyl disaster which are associated with large population concentrations in the northern hemisphere which,

> *...are creating an almost paranoid appetite for natural un-polluted food products in America, Europe and Japan.*[7]

The Peninsula is ideally situated to cater for this new and growing international market. In its short agricultural history, convicts and free settlers on the Peninsula have demonstrated they can produce foods of high quality and taste, including fruit 'fit for kings', cheese of excellent quality, wheat exhibited internationally and table birds which were known Australia wide for their quality. The convicts showed themselves to be innovative and skilled craftsmen engaging in a

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and Regional Development Division, 1987; Australian Regional Developments: 8.1 Country Centres Project, 1986-87, Australian Government Publishing Service, Canberra.; p.13

5 Department of Immigration, Local Government and Ethnic Affairs, Local Government and Regional Development Division, 1987; p.21 (see note 4)

6 Tasmanian Development Authority, 1989; "New Horticultural Opportunities: The Tasmanian experience", Paper delivered at the National Agricultural Outlook Conference, 1989; Hobart, p.1

7 Tasmanian Development Authority, 1989; "New Horticultural Opportunities", p.3 (see note 6)

variety of activities. They made their own flour, soap, candles, clothes and footwear. They built many ships, like the *Lady Franklin* which is still sailing today; magnificent buildings, steam engines, railways, granaries and mills. The free settlers developed a self sufficient agriculture and a thriving orchard industry. The activities of the convicts and free settlers prove beyond doubt that the Peninsula has a range of soil types, vegetation and climate which makes the area suitable for a variety of prosperous agricultural activities.

6.4 Local Co-operation

By co-operative action all local farmers would stand a better chance of stemming the decline of agriculture and of making the most of current economic opportunities.

The idea of co-operation and specifically of co-operatives is not a new one for farmers on the Peninsula. One resident has written of the early years of free settlement on the Peninsula that,

> *Community co-operation was one of the features of life in the district. Animals were loaned to the neighbours, some for breeding purposes, others for work. Equipment such as ploughs, harrows or carts were loaned or hired out; assistance and co-operation during harvesting and at other times, showed that good relationships existed in those early days.*[8]

A reading of the minutes of the Nubeena Branch of the Primary Producers Union (1937-1959) shows that farmers have often sought greater co-operation as a solution to their problems. Proposals suggested at meetings of Peninsula farmers have in the past included: the marketing of meat co-operatively with big selling floors in Hobart; co-operative butchers shops, co-operative credit union activities; co-operative milk and butter factories; a co-operative grocery business and

8 Greatbatch, N., 1987; "The Greatbatch Family", Tasman Peninsula Chronicle, No. 3 December 1987, p.31

the establishment of a Mutual Land Development Society to co-operatively facilitate the clearing of land draining and initial ploughing. In the 1930s co-operative fruit packing and timber milling took place. and a co-operative general store was established. These lasted for some 30 years.

That there are no co-operatives on the Peninsula today is not proof that co-operatives are less efficient than privately run companies. The disappearance of co-operatives is more adequately explained as a result of the disappearance of small farmers who were the lifeblood of the co-operatives The interests of agribusiness have actively sought, and continue to seek, to eliminate or absorb co-operatives.

Elsewhere in Australia many co-operatives are still in existence . There are currently 412 rural co-operatives registered in Australia with total assets of $2.1 billion. Sarah Sargent has described one of the more successful of these, the Namoi Cotton Co-operative. It is a fully integrated operation providing its farmer shareholders with seeds, help with irrigation and flood mitigation, insurance and finance. It transports the raw cotton to the gins for processing and negotiates domestic and export sales. It also has interests in cotton seed crushing and futures trading. The Co-operative endorses environmentally sound practices such as water conservation, crop rotation and environmental preservation.[9]

A co-operative of Peninsula farmers could engage in looking into ways of lowering costs, such as reducing inputs of expensive chemicals and the production locally of animal feed . Local fertilisers could be produced using the waste from intensive animal and fish production. Appropriate technology designed specifically for the needs of farmers could be developed. Other lowering of costs could result from more pooling of resources. Ways could be found to avoid having machinery worth $250 000 lie idle for nine months of the year as now happens

[9] Sargent, S., 1985; The Foodmakers; Penguin Books, Ringwood, Victoria, p.190

with some of the capital equipment on the Peninsula.

The current ABS definition of farmers excludes many of the small farmers on the Peninsula including those who are part-time, hobby and retired farmers, organic growers, kitchen gardeners and other potential farmers. If these groups are included for purposes of economic planning the potential of agricultural production on the Peninsula is increased both qualitatively and quantitatively.

Traditionally, small farmers or hobby farmers have provided some of the most important innovations and new ideas in agriculture and they represent a resource which can not be profitably ignored. Many small farmers would benefit from a co-operative which also engaged in research, co-ordination of regional marketing and distribution, transportation and selling. Such a co-operative could also be a way to guarantee consumers healthy, chemically free and tasty food and other products. It could focus initially on developing regional marketting, and then, with greater expertise progress further afield.

Ways could be sought to develop local investment funds which draw upon a range of local and outside investment and a balance of private and government funding. Such funds would be kept under local control. This would ensure funding for regional growth initiatives and the setting of long term interest rates at levels that attempt to balance the competing needs of short term profit with those of longer term regional growth. An investment fund could encourage greater horizontal investment between local industries and businesses so that, for example, farmers as a group could invest in low-cost tourist accommodation and in local restaurants which provide an outlet for locally grown produce. Local downstream processing of basic agricultural products such as milk and fruit would be increasing local returns. The first cheese factory on the Peninsula, for example, began in Koonya in the early 1900s. A local processing factory today would produce milk, cheese, butter, cream, yoghurt, whey for pig farmers and

higher returns for all involved. The orcharding industry on the Peninsula could also consider downstream processing including the manufacture of locally produced and branded jam, juice, cider, and scrumpy. Local planning could consider promoting organic farming methods which would reduce dependence on imports and reduce costs. Brand identification could promote locally grown organic produce, including historic varieties of apples like the Nubeena which are unique to the Peninsula.

The previous experience of substantial enterprises on the Peninsula suggests that such industries could be successful with local co-operation and care; and that they would need to be protected from takeovers and other predatory interests. The experience of previous small local producers is instructive in this regard. Bob and Rosemary Peterswald bought a six hectare apple orchard at Koonya in 1980 and began a business producing fruit juice with very basic equipment. They used an old Italian wine press which pressed 50 bushels of fruit every 40 minutes. The juice was popular and sold around the State under the brand name Apple Maid. By 1984, they were taking apples from several orchardists and producing approximately 4 000 litres of juice a week.[10] They supplied Coles supermarkets, throughout Tasmania, thereby guaranteeing a higher volume of sales. But while the Peterswalds produced 2 litres of juice for approximately $2.00, a margin of approximately $1.40 was added by Coles.[11] In 1986, the company launched a Cooler, a low alcohol drink based on cider and Tasmanian berry fruits and Tasmanian Scrumpy cider. They were sued for breach of copyright over the design of the label for the cider and eventually the local business closed in 1986, due in large part to the pressures exerted by major retailers and other big producers, in short agribusiness.[12]

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[10] The Mercury, 24/12/84; p.8

[11] Personal Communication, Peterswald, B., 18/6/91

[12] The Mercury, 2/9/86; p.14

The lesson that could be learned from this and similar experiences is not that local processing is unviable, but rather that to survive, home grown industries need greater protection and they are particularly in need of protection when they become successful. This is clearly evidenced by the stories of Glenila Poultry, Apple Maid and Baker's Milk.

On the Peninsula in earlier times, there have been slaughter yards, a tannery, leather making shops and co-operative slaughter yards. Today, co-operative action between local livestock producers and existing businesses could establish greater regional returns for business and farmers alike. Livestock producers on the Peninsula could supply co-operative sale yards and slaughter yards linked to local butcheries with wholesale and retail outlets for meat. Any number of downstream activities could be entrained to earn further local income, including tannery works and the provision of leather for local craft works.

Grain has been grown on the Peninsula since the 1840s. During the convict period it provided the population with all its flour needs and a surplus for export. The convicts built a flour mill and granary powered variously by water power, steam power and convict power. In the 1960s, grain was grown for the local poultry industry while it was under local control. A local mill could provide the Peninsula with animal feed, and flour. If grown organically these products could attract premium prices. In Europe, consumers now pay up to a 50% premium for organically grown wheat. The development of grain based fuels such as ethanol to provide self sufficiency in fuel is also worth serious consideration. If a mill and granary were constructed in the tradition of the convict heritage they could also provide a valuable tourist attraction.

In the 1840s there was an experimental horticultural station on the Peninsula where hops, vegetables, flax and fruit where grown. Local

farmers could consider the possibility of re-establishing an experimental station. They could also seek funding for heritage conservation to restore one of the early prison farms as a working museum of agriculture. Such a museum could serve a number of functions, including restoration of some of the original gardens, orchards and hop fields; preservation of past farming practices, machinery and general history. The museum could serve as an educational centre and provide tourists with an understanding of the history of local farming as well as engage in current research, experimentation and extension work.

6.5 Regional Growth Initiatives

Co-operative pooling of resources and the creation of investment funds under local majority control, combined with a local economic planning process would make it possible for the community to selectively identify and fund regional growth initiatives. These could be based on the unique qualities of the region, seek to plan for long term sustainable development, bring greater profit retention within the community and generate local employment. The TDA has outlined some of the already successful growth industries which could be set up on the Peninsula:

Tasmanian wine production has increased dramatically from 200 tonnes in the mid 1980s to an estimated 1 200 tonnes from the 1991 vintage, with 38 licensed wine growers. Burgundian varieties Chardonnay and Pinot Noir, accounted for about 30% of the 1991 vintage. Cabernet Sauvignon and Riesling make up most of the rest.[13] Flower growing is also a growing industry, with Tasmanian farmgate sales of flowers worth $5.5 million in 1989.[14]

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[13] The Mercury, 17/7/91; p.9

[14] Tasmanian Development Authority, 1989; "New Horticultural Opportunities", p.5 (see note 6)

The TDA has also identified a number of areas where local production could be increased to replace imports. At the moment Tasmania imports: cut flowers to the value of $3.5 million; mixed herbs worth $7.9 million; nuts worth $54 million and fresh berries worth $6 million.[15] The TDA has pointed to the import of dairy products into Australia which increased by 15.6% in 1989/90 and were valued at $103 million.[16] The TDA has also pointed to the growing demand for gourmet products. In Tasmania the production of dairy gourmet products was valued at $11.4 million, or 5.4% of the total sector sales. In the meat industry gourmet products accounted for 5.7% of turnover or $12.5 million. Australia's overall meat imports for the same year were $160 million. [17]

6.6 The Organic Opportunity

In a recent report, R. J. Hardy of the Tasmanian Department of Primary Industry, looked at the potential of organic agriculture in Tasmania. His study shows that although currently organic produce is only a small proportion of the food industry, making up 1% of the market, there is a growing market for organic food in Tasmania, Australia and Europe. [18]

Hardy says that consumers have shown a growing preference for fresh and chemical free food. In Australia, in the 17 years between 1969 and 1986, per capita consumption of fresh foods rose by 27%. Market demand for organic produce is strong and could exceed 10% of the total market demand. Furthermore, consumers are prepared to pay higher prices for organic products.[19] The New Zealand Horticultural Market

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15 Tasmanian Development Authority, 1989; "New Horticultural Opportunities", p.7 (see note 6)

16 Tasmanian Development Authority,, March 1991; "Tasmanian Food Processing Industry Review", Business Research Hobart, p.10

17 Tasmanian Development Authority, March 1991; p.9 (see note 16)

18 Hardy, R. J., 1989; Organic Horticulture in Tasmania; A Feasibility Study, The organic movement and its potential contribution to Tasmanian horticulture, Department of Primary Industry, Tasmania, Hobart, p.60

Research Unit in 1986, considered the prospects for organic produce to be excellent in the Federal Republic of Germany, Britain, the West Coast of the US and Japan where premiums of 20- 30% were common.[20] Hardy is of the opinion that the organic movement is certain to,

> *...gain rapidly in support and profile with mankind's increasing concern with chemical contamination of foods, contamination of the environment by agriculture forestry and industry, decreasing availability of fossil fuels and degradation of soils.*[21]

Hardy's feasibility study suggests that although more research needs to be carried out, organic farming will continue to grow as will the demand for organically grown food. He identifies promising export markets but suggests that

> *...local producers first develop expertise on a small scale organic system supplying the local market. Then with increased experience they can aim to supply the export market.*[22]

He points to the need for greater co-ordination of the marketing of organic products. He also points to the example of organic growers involved in more sophisticated organisation in Britain who have formed co-operatives for the marketing of their produce in retail and wholesale stores. By guaranteeing a market this has also helped producers.

To the extent feasible, organic farming systems rely upon crop rotations, crop residues, animal manures, legumes, green manures, off-farm organic wastes, mechanical cultivation, mineral-bearing rocks,

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19 Hardy, R. J., 1989; p.60 (see note 18)

20 Hardy, R. J., 1989; p.22 (see note 18)

21 Hardy, R. J., 1989; p.60 (see note 18)

22 Hardy, R. J., 1989; p.60 (see note 18)

and aspects of biological pest control to maintain soil productivity and health.

Numerous comparative studies of the economics of organic or chemical-free alternative agriculture and conventional broad acre agriculture have demonstrated that while the cash costs and cash receipts on alternative farms are considerably lower than in conventional agriculture, the cash operating surpluses are often similar.[23] In other words, organic agriculture is becoming more and more viable.

A number of countries in Europe, including Austria and Denmark are leading the way by introducing legislation which encourages organic agriculture. Farmers are offered financial support to aid the adoption of organic methods. Legislation also deals with the authentication of organic farms, the definition of minimum standards, the establishment of an official system of labelling and on-farm control, and the control of the processing and marketing of organic produce.[24]

Although Tasmania has very few organic farmers the number is increasing. There are only two organic farms, one orchardist and a dairy farm which are considered "commercially viable units" as defined by the ABS, although there are many small organic farmers.[25] The organic movement in Australia is represented at the National level by the National Association for Sustainable Agriculture, Australia (NASAA). In 1989, there were eight NASAA certified farms in Tasmania. The largest farmer in Tasmania, Bert Farquhar farms within the NASAA guidelines. In 1989, four organic farms were certified in one week. They included the farm of Mr D. Burgess of Lucaston (Fruit, vegetables and beef); Mr M. Clark of Lilydale (blueberries and soft fruits); Uta Mueller, of Lapoinya (pastoralist) and

[23] Hardy, R. J., 1989; p.4 (see note 18)

[24] Hardy, R. J., 1989; p.15 (see note 18)

[25] Hardy, R. J., 1989; p.61 (see note 18)

Mr Davis of Sorell (vegetables, fruits and beef).[26]

On the Peninsula, Mr and Mrs Robinson have an organic farm which has been certified by NAASA. They grow vegetables for some local shops and restaurants, Eumarrah Health Foods and a number of restaurants in Hobart. Mr Robinson has confirmed that demand for their produce far exceeds supply.

6.7 Tourism and Heritage Conservation

In 1989 the Tasmanian Tourist Department produced a research bulletin in which it identified the "Anti-tourist".[27] The research suggested that changes occuring in public attitudes towards conservation are being reflected by changes in the tourism market. The "Anti-tourist" was described as an individual who tends to avoid traditional tourist venues and activities, (ie. organised tours, international hotels, holiday resorts). These people prefer small, personal, stylish accomodation, good local food and wine, natural environments, guest houses and wilderness cabins. The research estimated that they could represent 77% of potential domestic tourism traffic in Tasmania. In this context a co-operative on the Peninsula could look into the possibilities for local farmers to invest in tourist accommodation and restaurants in the areas of low cost accommodation and could provide regional marketing facilities for all host farms and hostels.

Lydia Uy has commented specifically on the Peninsula and the role that investment in conservation can play in promoting more general economic development. She says,

> *...environmental projects and activities, contrary to the well established myth ...are capable of generating benefits*

[26] Tasmanian Country, 10/2/1989, p.14

[27] Department of Tourism, Sport and Recreation, Tasmania, 1990; "Anti-Tourist", Research Bulletin, Hobart.

comparable to those attributed to traditional development. This is self evident in the Port Arthur Restoration Site. The phenomenal growth of tourist investments, with significant implications for the economies of Tasman Peninsula and Tasmania, hinges on the conservation and restoration effort at Port Arthur.[28] .

In this respect the Peninsula already leads the way. The main problem with on-going conservation projects is the lack of funding and its intermittent nature.

Here again, local planning could assist by developing initiatives which seek contributions from government funding to assist in locally designed projects which provide local benefit. Emphasis could be placed on using local materials and skills wherever possible in restoration work. This would require the development of long term planning to provide the necessary materials, skills and training for carefully selected projects. Long term planning could require the planting and maintenance of forests as wood banks or supplies for timber, the production of bricks, the quarrying and cutting of stones, metal and woodwork and the establishment of local apprenticeships and training schemes.

6.8 Forestry: "Green Collar" workers

The Peninsula's forests have always provided a great deal of wealth for its inhabitants. In the light of the recent decline in local availability of good quality timber for sawmilling and the difficulties of small sawmillers, a local strategy could be developed which provides for the long term supply of timber for local activities including heritage conservation, timber milling, kiln drying and a furniture industry. To guarantee such a wood bank it would be importantis that employment

[28] Uy, L., 1989; "Tasman Peninsula: tourism and tourist potential (some difficult issues" in Smith, S.J., (Ed), 1989; Tasman Peninsula- Is History Enough?: Past, Present and Future use of the Resources of Tasman Peninsula. Royal Society of Tasmania. Hobart, p.136

and funding be directed to the creation of jobs in local forestry including the planting of many areas which are unused; the thinning of regenerated forests, fire control and the construction of walking tracks.

The Peninsula community could look at the creation of a large *"green collar"* workforce as a long term investment in the health of the local economy and environment. By employing many people on a part-time basis a wide range of skills could be encouraged. Training programs could be developed in conjunction with the Forestry Commission, walking clubs, and the National Parks and Wildlife Service. Training programs could be directed to many areas such as tree planting, thinning and felling, fire protection, track making, botany and biology, identification of local flora and fauna, archaeology and heritage conservation.

Rather than just selling forests for woodchips, farmers could consider more local downstream processing for local wood. This could include investment in kiln drying, furniture making and the provision of materials for historic reconstruction. Conservation and restoration of historic sites would generate long term, sustained needs for timber milling, wood-working and craftsmanship of the highest quality. In particular, the reconstruction of an authentic steam sawmill would also link the activities of sawmilling with heritage conservation. It should be noted that the convicts were able to construct their own steam engines.

There is scope for generating forest industry jobs by increasing the degree of processing in sawmills and the quality of design of wood products and furniture making. Tarlo and Miller argue that it is important to,

> *...find and consolidate new markets which capitalise on Tasmania's ability to grow high quality and appearance grade timber from eucalypt and secondary species by*

processing into higher value added wood products. This entails increasing the proportion of timber which is processed into seasoned and dressed timber, mouldings and veneers.[29]

In another report published by the TDA in 1990, it was estimated that the furniture industry in Tasmania employed approximately 900 people. Smaller sized firms made up 50% of all manufacturing firms. Industry turnover was estimated at $56.8 million[30] with an estimated potential for growth in turnover of 20% or $11 million.[31] In other words it was estimated that the industry was operating at only 80% of potential capacity. It also considered that there was room for growth of small scale production in selected niche areas. Local furniture making could be encouraged to fill these niche areas by investment in kiln drying and timber milling, and by the development of local training schemes and regional marketing.

6.9 Recreation

The Peninsula Environment Network (PEN) says that the development of the Fortescue Forest Reserve by the Forestry Commission in the 1980s has shown the potential for restoration and preservation of the environment to develop hand in hand with the provision of jobs and to encourage tourists to stay longer in the area. The Forestry Commission began to develop the camping area in 1980 and employed a resident caretaker from 1985. Rubbish was removed and a comprehensive program of erosion control, landscaping and revegetation was carried out. The Commission organised a Community Employment Program project to cut a new walking track

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29 Miller, J., & Tarlo, K., 1985; Forest Industry Strategy for Tasmania: Protecting Jobs and Forests, Australian Conservation Foundation and Tasmanian Conservation Trust,Tarlo, K.; p.31

30 Tasmanian Development Authority, October 1990; "Furniture Industry Review", Business Research, Hobart, p.10

31 Tasmanian Development Authority, October 1990; p.11 (see note 28)

to Cape Hauy and has co-operated with the Hobart Walking Club in the continued upgrading of the Tasman Track from Fortescue to Waterfall Bay. At Fortescue Bay two camping sites have been laid out and facilities such as water supply, toilets, and fireplaces provided. These improvements have paid off as there has been a steady increase in the number of visitors to the area. It is also used as an outdoor educational facility.[32] In its "Fortescue Forest Reserve: Management Plan", the Forestry Commission estimated in 1988 that approximately 7 900 campers used the Fortescue Bay campground in 1985/86 and 8 800 in 1986/87.[33] Fortescue Bay is only one of a number of similar potential recreational and educational sites which would benefit from careful development. Many other bushwalks on the Peninsula have already been detailed in a book published on the Peninsula called Tasman Tracks.[34]

6.10 Semaphore Stations

Perhaps in the area of local forestry, planning could incorporate the old semaphore stations as a focus for providing a link between forest management and conservation heritage. In 1847 there were 13 semaphore stations on Tasman and Forestier Peninsula's. The remains of the stations are still evident. They were built on the major mountains and hills of the Peninsula, including Mt Arthur, Arthurs Peak, Mt Fortescue, Signal Hill, Mt Communication and Mt Wilmot. Conservation heritage could consider the possibilities of reconstructing a number of semaphore stations. Such a project would require archaeological investigation and construction. They could be linked to major walks such as the Tasman Trail - providing a rest and shelter for walkers and forestry workers and be useful for fire observation. The mountains and hills are also important areas for nature conservation as they are the catchments for streams and are areas of remaining

[32] Tasman Gazette, August 1988.

[33] Forestry Commission, Tasmania, 1988; Fortescue Forest Reserve, Management Plan.

[34] Storey, S. & P., 1990; Tasman Tracks; 25 Walks on The Tasman and Forestier Peninsulas, Koonya Press, Koonya.

rainforest. Reconstructed stations could therefore be used as experimental and educational bases for observations of hydrology, meterology and ecology. Volunteer teams could even attempt to signal the arrival of the first Sydney-Hobart yachts.

6.11 Wooden Ships on the water

A regional growth intiative could be directed to the area of shipbuilding, linked with heritage conservation, to reconstruct the transport route of 1830 - 1950 which connected Port Arthur with Hobart. Ships travelled between Hobart and Norfolk Bay; a railway connected Norfolk Bay with Long Bay and a whale boat connected Long Bay with Port Arthur. Such a project could involve a wide range of activities including archaeology, shipbuilding, re-construction of dockyards, wharves and jetties, construction of rail-lines, boilers and carriages. The route of travel could provide tourists with a different way of seeing the Peninsula at a more leisurely pace lengthening the journey from two hours into a day, with interesting stop off points along the way.

The massive popular interest shown in sailing ships at the time of the Tall Ships race in 1988, is proof of the fascination which these ships hold for people of all generations. Port Arthur was once a major ship - building centre and the local timber, particularly Blue Gum, provided excellent building material. A project to build a sizable ship would pass on the craft and skill of shipbuilding to the younger generation before it is lost. A ship under local control could serve many functions to earn revenue. It could be used to take tourists for day voyages along the spectacular coastline. In the winter months the ship could be used for longer cruises, scientific research along the Peninsula's coastline and as a training ship for sailing and navigation. Once again an historically sucessful economic activity could point the way to possible future economic success on the Peninsula.

6.12 A new beginning

> *....it is not a question of choosing between "modern growth" and "traditional stagnation" but rather of finding the right path of development, "the middle way between material heedlessness and traditionalist immobility", in short, of finding "Right livelihood".*[35]

Some of the suggestions contained in this chapter are not particularly new or original, but this does not detract from their relevance. In making these suggestions I have drawn upon history; the previous use of the Peninsula's resources; the skills of the population; the different historic models of economic interaction; recent world trends and the need for a balance between economic development and preservation of the human and natural environment.

This thesis does not argue that economies of scale are inherently bad. It simply suggests that economic planning should also consider other economic scales and different types of production particularly: self sufficiency, domestic economies, small businesses, co-operatives and local economies. This thesis does not argue that export trade should be ignored but suggests that there are other markets which could be usefully cultivated. In particular better economic organisation at a local and regional level would provide an integrated local economy capable of raising and directing local investment into growth initiatives which will benefit the community first rather than just the shareholders of large corporations.

History is not enough by itself, but it can give a perspective and give plans and actions the most sound of foundations.

Nor is theory enough by itself, because as a long dead German writer Goethe, once explained,

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35 Schumacher, E. F., (1975), *Small is Beautiful; Economics as if People Mattered*, Perennial Library Harper and Row, London. p.62

Grey, my dearest friend, is all theory,
and green the golden tree of life.[36]

The Tasman Peninsula, in future, provides both an opportunity and a challenge. It is in the interests of current and future residents to co-operate in exploring and building that potentially evergreen future in realistic, practical and mutually beneficial ways.

[36] Qoute from Goethe , in Ramage, C., T., 1904; Familiar Quotations from German and Spanish Authors, George Routledge and Sons, London, p.52

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